MEAT & LIVESTOCK
A U S T R A L I A

A customer driven approach to the development of a Southern Australia Beef Program

Part 1
Producer & Provider Requirements

Using Quality Function Deployment as the basis for Strategic Planning for future R&D Programs for the Southern Australian Beef Industry

March 2001

People

CONTENTS

FOREWARD

This report describes the output of the details and extensive market research Project to determine the outcomes that beef producers and service providers desire in a future R, D & E Program in the southern beef industry.

The Project was commissioned by Meat & Livestock Australia Ltd (MLA) and sponsored by industry representatives including:

David Crombie, Chairman, Meat & Livestock Australia
Peter Milne, President, Cattle Council of Australia
Dennis Rowe, Chairman Southern Australia Beef Research Council
Dr Len Stephens General Manager, Livestock Product Innovation, MLA.

The report was prepared by a Working Group established to plan a new research development and information delivery (R, D & E) program to improve the profitability and sustainability of the 'on-farm sector' of the southern Australia beef industry. Members of the Working Group were:

Bill Bray, producer Victoria
Lucinda Corrigan, producer NSW
Tom Dunbabin, producer Tasmania
Tony Hiscock, producer Western Australia
Dennis Rowe, producer South Australia
Lew Smit, producer Western Australia
Dr Peter Speck, research & development provider South Australia
Dr Brendan Tatham, research, development & extension provider Victoria
Gary Want, research, development & extension provider NSW
Professor Robert Hunt, Macquarie University, Sydney
Mike Walker, QFD Consultant & Project Facilitator, Brisbane
Greg Wall, Meat & Livestock Australia
Ian Simpson, Meat & Livestock Australia
Dr Hutton Oddy, Project Leader, Meat & Livestock Australia

This report provides a summary of the main results of the Project. It is the primary source of information on the outcomes required by beef producers from R, D & E. It is strongly advised that persons wanting to gain a more comprehensive understanding of the views of producers in the southern Australia beef industry read the supporting documents on the qualitative market research and extensive comments provided to open ended questions in the quantitative market research.

Dr Hutton Oddy
Program Manager
Southern Beef Production Systems
Meat & Livestock Australia

March 2001

EXECUTIVE SUMMARY

This Project was commissioned to develop a strategic plan for Meat and Livestock Australia's (MLA's) future investment in research, development and information delivery (R, D & E) for the 'on-farm sector' of the Beef Industry in southern Australia. The objective is to develop a portfolio of activities with an on-farm focus, within the context set by the Beef Industry Strategic Plan (BISP).

The report details the first step in developing the strategic plan. It describes the outcomes of detailed and extensive market research to determine producer and provider outcomes and attitudes to R, D & E. Over 500 producers, representing different segments of the southern Australia beef industry, were asked to identify what they believed were the important outcomes (not solutions) from R, D & E directed to improve the profitability and sustainability of their on-farm beef business activities.

The CD-MAP® Quality Functional Deployment (QFD) process was used to produce detailed and extensive market research and help translate this into sub-programs, strategies and actions. This market research involved collecting both qualitative and quantitative data on customers' and stakeholders' requirements to guide the Program development and to ensure customer outcomes are achieved.

The **customers** involved in the market research to develop a future Program are in three groups:
- ♦ **Producers** who were surveyed on their attitudes to and outcomes required from on-farm research and information delivery
- ♦ **Researchers and information deliverers** who were surveyed as to their outcomes and attitudes to the processes involved in the industry management of research and information delivery
- ♦ **Other stakeholders** both within MLA and externally in other organisations who have stakes in the southern Australia beef industry.

Producer Outcomes

There were twenty outcomes identified as most important to producers. Of these the top five ranked statements all contributed directly to the essential knowledge and skills required to conduct a successful beef business. They are:

1. Know how to maximise beef production from the feed resources on your property
2. Know how to control and manage diseases and health problems affecting your cattle
3. Know how to maximise feed from your pastures without degrading the land
4. Have the business and planning skills to maximise return on investment
5. Have the knowledge and skills to adapt your production system to market specifications.

Provider and Stakeholder Outcomes

Market research was conducted with R, D & E providers and other stakeholders using a similar approach to that used with producers. In the R, D & E provider sector, ten significant outcomes were identified, the four most important being to:

1. Encourage lateral thinking and innovation in project design, implementation and delivery
2. Ensure research outcomes are packaged in a format that can be easily delivered
3. Provide clear directions on program objectives
4. Ensure appropriate information delivery is planned into projects at the start.

The team identified the R, D & E industry processes that need to be improved to deliver these outcomes and enhance satisfaction among R, D & E providers. The survey also highlighted the issue of a decline in the long-term capability of public sector R, D & E to adequately service the Beef Industry in southern Australia.

Attitudes

The survey also recorded the responses to a number of attitude statements. There was strong overall consistency and alignment between producers and R, D & E providers to these attitude statements. In particular there was:

❖ Strong agreement across all industry sectors that a major factor in future market access will be a Quality Assured production system delivering a healthy product to consumers
❖ Commitment by providers to achieving similar outcome goals to those identified by producers
❖ Strong alignment in opinion about the benefits and costs of responsible environmental management to the beef business.

The strength of the consistency and alignment simplifies future Program development because the producers and providers already have common views on the important areas of R, D & E in the industry.

Project Outputs

The Project provided the planning process with a comprehensive understanding of the attitudes and customer-desired outcomes for R, D & E to improve the profitability and sustainability of the on-farm sector of the southern Australia beef industry. These Project outputs will be combined with further background studies including industry Situation Papers, an analysis of beef industry opportunities and consultation industry stakeholders, to provide a comprehensive basis for the development of the southern Australia beef industry Program in MLA's Corporate Plan.

The core elements of the proposed Corporate Plan and new Program include:

Vision

An innovative and invigorated beef industry for southern Australia.

Mission

Prosperous and sustainable production of quality beef through continuous improvement to on-farm decision making practices.

The '*Profit & Proof*' principle identified by market research as the main factor likely to persuade producers to adopt new practices, has been adopted as the Program Positioning Statement.

This, when combined with the positive attitude that producers have indicated to new on-farm technology and their belief in the need for further R, D & E to find new technologies to use on-farm, will shape the development of a portfolio of future R, D & E activities.

Program Objectives

1. Lift beef industry success in meeting market specifications, by 25%

2. Increase the number of producers adopting industry best practices, by 30%

3. Reduce cost of production per unit for individual farm businesses, by 10%

4. Increase the number of farm businesses adopting sustainable practices, by 30%

5. Increase consumer confidence in beef and on-farm production systems in southern Australia.

Sub-Programs

Based on the market research in this Project, the Working Group agreed on a new on-farm R, D & E Program with four major Sub-Programs.

- ❖ Enhancing productivity of the beef business
- ❖ Environmentally sustainable beef production
- ❖ Beef business management skills
- ❖ Beef industry communication and product delivery.

In particular, these Sub-Programs will address the desired business outcomes identified by producers through the CD-MAP® QFD process.

The new southern Australia Beef Program will be implemented over the period, 2001 to 2006 and will be included in the MLA 3 to 5 year Corporate Plan, beginning 1 July, 2001.

1. INDUSTRY BACKGROUND

1.1   The Beef Industry in Southern Australia

The southern Australia beef industry has 14 million cattle with an annual farm gate gross value of $2.8 billion in1999 -2000. The industry is comprised of more than 63,000 business units occupying around 40% of the land area (see Figure 1).
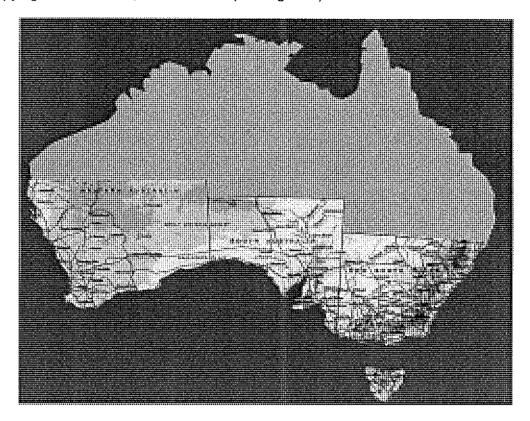
Figure 1. The geographic extent of southern Australia Beef Program

Only 12,200 beef producers in southern Australia have a herd size of greater than 300 head. Over 60% of cattle are produced by the largest 20% to 30% of beef businesses.

The beef industry in southern Australia consists of six defined business segments. These are described as: the 'specialist' beef producers (small, medium & large scale); and the mixed enterprise beef businesses (small, medium and large scale). Collectively temperate southern Australia has 54 % of the total Australia cattle numbers and produces 54 % of the total value of production.

The respective production contribution to the total industry in southern Australia is shown in the Figure 2.

THE 6 TEMPERATE & SUB TROPICAL ZONE BEEF MARKETS

* Temperate represents 54% of total Aust cattle numbers and 64% of value of production
Total Value of Production - Temp & Sub Trop Zone: $2,151mill
- AUST: $3,360 mill
Total Cattle Nos - Temp & Sub Trop Zone 12,908,245
- AUST: 23,835,645

Source ABS (1996)
compiled by Rendell McGuckian
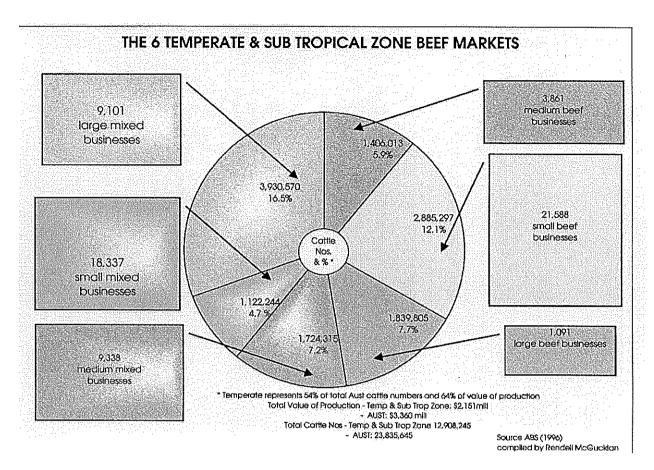
Figure 2. Beef business segments from which producers in each state were surveyed.

Producers predominantly turn off grass-finished cattle for vealer, domestic and high value export markets. There is also an increasing proportion of cattle (currently estimated at 15%), entering feedlots. On many properties beef production is only one component of the enterprise mix with producers changing this mix to maintain whole farm viability and profitability.

ABARE estimates the average rate of return on investment is currently low (less than 1% pa). There is however a wide range in farm business profit in the industry with up to 9 percent of producers having a greater than 10% return on business investment while 70 percent are recorded as having a negative return.

Currently R, D & E in the beef industry is provided by a wide range of providers in southern Australia. These include: agribusiness (including pasture seed and fertiliser company representatives, animal health agents and so on); professional advisers, consultants and the veterinary profession; and a range of largely public funded providers including State based agencies, Universities and CSIRO.

In general, the public sector group generates new knowledge in preference to providing on-farm services to the beef industry. There is also a range of providers of public R&D and services that impact on the beef businesses. These include the other Research & Development Corporations and instrumentalities servicing the fibre, grains and environmental sectors of agriculture across southern Australia.

1.2   Beef Industry Strategic Plan

As part of the current Beef Industry Strategic Plan (BISP) to the year 2002, Strategic Imperative 4 has as its focus '*Developing an internationally competitive supply of our products*' and covers the on-farm sector of the industry. There are four sub-sections to this imperative, three dealing with 'On-farm efficiency':

> 4.2 - Business Management with the strategy to 'Improve business skills and capability to prosper in a competitive environment'.

> 4.3 - Feed efficiency and natural resources with the strategy of 'Improvement in grazing and other on-farm land management strategies'.

> 4.4 – Animal health, production and genetics with the strategy of 'Utilisation of genetics to efficiently meet individual market specifications'.

The BISP identifies a number of Goals under each of these Strategies.

1.3   MLA Planning Project

To progress the development of a whole of industry plan, Meat and Livestock Australia (MLA) in association with the Southern Australia Beef Research Council (SABRC) commissioned a Working Group with producer, provider and stakeholder representation. The charter of the Working Group was to collaborate in the development of a new Program with a portfolio of research, development and information delivery Sub-Programs to benefit the on-farm sector of the southern beef industry. The term **on-farm** is used to describe any activity controlled by the management of the beef enterprise including on-farm marketing but not including domestic or international market development.

Members of the Working Group and their organisational interests are listed in the Foreward Section of this Report. The Working Group met for six workshops of two days duration each over a five-month period from July to December, 2000.

The objective of the Project was to develop a portfolio of R, D & E activities with an on-farm focus, within the context set by the Beef Industry Strategic Plan, to achieve an increase in the profitability and sustainability of beef businesses across southern Australia.

The Project scope was to identify and initiate a process to address those outcomes that can be delivered by actions taken on-farm (either singularly or co-operatively). It included a wide range of issues embracing: animal and plant improvement; management of the physical, human, and natural resource base; disease control and animal welfare; business management; and on-farm actions that affect enterprise sustainability. It also included actions that impact on product quality, consumer confidence, seasonality of supply, growing the knowledge base, personal development, communications, meeting market specifications and cost of production.

2. THE CD-MAP® QFD PROCESS

The CD-MAP® Quality Function Deployment (QFD) process was used as the basis for developing the strategic plan for the new Southern Australia beef industry research, development and information delivery Program.

QFD is a methodology for understanding and quantifying customer outcomes and for translating these customer needs into strategies and actions. The CD-MAP® QFD process is a facilitated team-based QFD approach that involves rigorous market research and benchmarking data inputs in combination with the analysis and experience of the Working Group. It involves a series of steps as shown in the following road map (Figure 3) adapted for RD&E planning:

CD-MAP® - RD&E Planning Road Map
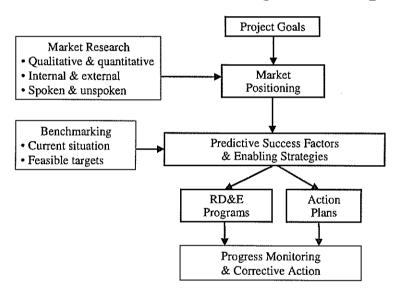
Figure 3. The CD-MAP® process adapted for RD&E planning

Summary of QFD process

❖ Extensive customer research and consultation designed to understand the *outcomes* the customers hold to be valuable or desirable, sometimes referred to as *the voice of the customer.*

❖ Statistically valid, quantitative market research to weight the importance of these outcomes to producers and ascertain what they think of the current performance of the beef industry on these outcomes.

❖ A similar process to research the needs of the beef industry research, development and information delivery providers.

❖ The identification of unspoken outcomes that are potential sources of added value to excite customers, or basic outcomes that will cause dissatisfaction if not managed correctly.

❖ This data is analysed and interpreted by the Working Group to determine the market positioning, that is the priority customer outcomes necessary to satisfy and excite producer, providers and other stakeholders.

❖ The Working Group then translates the market positioning into *predictive success factors (PSFs),* that will best ensure the delivery of customer outcomes. These PSFs are the

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priority areas for R, D & E programs and projects, as well as the improved management processes.

Overall the market research aims to provide a clear understanding of the needs of the customer community, and the needs of the providers who are involved in providing outputs for those customers.

There are two final deliverables from the CD-MAP® process in R, D & E planning:

❖ Core research and information delivery programs
❖ Action plans to improve the management processes used in initiating, developing, selecting, monitoring and re-directing projects.

Progress monitoring and corrective action systems are then put in place to ensure plans are effectively implemented.

3. PRODUCER MARKET RESEARCH

3.1 Qualitative Market Research

The QFD process involves detailed and extensive market research to provide data, both qualitative and quantitative, on producer, provider and stakeholder customer requirements with regard to research and information delivery to the beef industry in southern Australia.

Qualitative market research or the *'voice of the customer'* is the fundamental basis for further market research and analysis in QFD. The qualitative research provides useful information that improves the understanding of customers and is critical for designing the questions in the quantitative research survey.

Initially qualitative market research was conducted with an industry cross section of thirty producers in the southern states of Australia (6 each in NSW & Victoria; 12 in South Australia; 4 in Tasmania; and 2 in Western Australia). The qualitative research was conducted independently and in all cases respondents' confidentiality was respected to encourage them to speak freely. Respondents were encouraged to discuss the outcomes and potential benefits that R, D & E could impact on their business.

The verbatim comments *(voice of the customer)* from the qualitative phase of the Project were collated in a report and Appendix 1 sets out the most typical verbatim comments of producers grouped by outcome. The full record of key comments is available for future strategic and operational planning.

This qualitative data was analysed to identify the potential **outcomes** considered important by producers and other customers. True customer outcomes are **concept non-specific** in that they describe the benefits customers are seeking rather than the means to solve them. They also have the important advantage that they are **stable over time** in that true outcomes existed in the past and will exist in the future, although solutions may change as technological advances are made. Because they are concept non-specific and stable over time, outcomes provide a solid basis for the future planning of the southern Australia Beef Program.

The qualitative market research provided an in-depth understanding of the desired outcomes of the producer customers and provided the data to design the quantitative surveys (see Appendices 7 and 8).and to determine the correct sample design

3.2 Quantitative Research Response Breakdown

Using the QFD process, a total of 465 randomly selected producers were surveyed across all southern Australia states. Respondents were assured of confidentiality to encourage them to respond freely. Two states (NSW & WA) were split to identify differences in producer responses that may exist because of a variation in the production systems caused by rainfall patterns and / or soil type differences. The South Australia results were also separated into the more intensively settled areas in the south east and the grazing areas of the rest of the state. The average annual rainfall for all survey respondents was 750mm with a majority in the 400mm to 1000mm range.

The number of producers surveyed in each State ranged from 55 in South Australia up to132 in New South Wales. The numbers and proportion surveyed in each State and the total numbers of beef cattle are shown in Table 1.

State	Producers Surveyed (number)	Total Surveyed (%)	Total Beef Cattle (million)
New South Wales	132	28.4	6.1
Victoria	92	19.8	4.0
Tasmania (#)	97	20.9	0.7
South Australia	55	11.8	1.2
Western Australia	89	19.2	1.9

(#) *Tasmania was over-surveyed but this did not influence the final outcome of the Survey*

Table 1: Breakdown of producers surveyed and total cattle numbers by State.

In terms of business size the industry may be classified into those who are:

* *Small* producers with an gross income of less than $100,000
* *Medium* producers with a gross income between $100,000 to $300,000
* *Large* producers with more than $300,000 gross income.

Around half (47%) of the survey respondents were specialist beef producers deriving 80% or more of their income from beef production. The balance can be classified as mixed beef producers with some income sources from enterprises other than beef.

Each industry sector was well represented in the survey with *Small beef businesses* and *Small mixed businesses* being the most surveyed producers. The beef industry in southern Australia has a large proportion of small beef businesses. *Medium sized Beef* and *Medium Mixed* businesses, as well as *Large scale Beef* and *Large Mixed* business operations are a smaller proportion of total beef businesses. The survey specifically sampled extra producers in these categories to obtain enough responses to provide statistically valid data (Table 2).

Beef Markets	Producers surveyed (number)	Producers surveyed (%)	Business Numbers (thousand)
Small beef	137	29.4	21.6
Medium beef	36	7.8	3.9
Large beef	46	9.9	1.1
Small mixed	175	37.6	18.3
Medium mixed	48	10.3	9.3
Large mixed	23	5.0	9.1
Total	**465**	**100.0**	**63.3**

Table 2. Breakdown of survey numbers by Beef Markets

The median property size in the sample was 440ha although there was a large variation in size (as is typical of the southern beef industry) ranging from 10ha to 5,000,000ha.

There was large variation in herd size with the median being 180 head. In the survey group, 25% of producers run more than 750 head. The herd size ranged from 25 up to 35,000 cattle.

The survey aimed to interview a principal decision making member of the beef enterprise business. The survey identified a range of other people involved in assisting this person in the day-to-day operations of the property, including a spouse (59.8%), siblings (9.3%) and parents (7.7%).

The survey also aimed to understand any differences in the needs of the various production phases in the beef industry. Survey respondents reflect the different types of production systems shown in Table 3.

Beef Markets	Producers surveyed (number)	Producers surveyed (%)
Breeder	360	77.4
Finisher	76	16.3
Backgrounder	9	1.9
Lot Feeder	7	1.5
Dairy Beef	13	2.8
Total	**465**	**100.0**

Table 3. Breakdown of survey numbers by beef business structure

There was a range of ages in the 465 producers surveyed (Table 4). In the survey, 59% of respondents were 50 years of age and over reflecting the aging of producers in the southern Australia beef industry.

Age Category	Producers surveyed (number)	Producers surveyed (%)
Less than 20 years	2	0.4
20-39 years	69	14.8
40-49 years	118	25.4
50-59 years	159	34.2
60-74 years	99	21.3
75 plus years	18	3.9
Total	**465**	**100.0**

Table 4. Distribution of producer survey respondents within age categories

The survey also reflected the preponderance of males in Australian agriculture and the southern beef industry as shown in Table 5.

Gender	Producers surveyed (number)	Producers surveyed (%)
Male	364	78.3
Female	101	21.7
Total	**465**	**100.0**

Table 5. Breakdown of survey numbers by gender

Summary of Survey Response Figures

In summary, the sample included enough beef producers in each industry segment (small, medium and large enterprises in both predominantly beef businesses and mixed enterprise farms), from each State, and across all business structures and age groups. This gave the Working Group confidence that the producer responses were an accurate reflection of beef businesses across southern Australia.

4. PRODUCER SURVEY RESULTS

4.1   Producer Priorities and Performance Perceptions

The core of the quantitative survey questions (Appendix 7) involved respondents ranking a series of the outcome statements and then scoring their perception of how satisfied they were with current research and information delivery for each outcome. Questions about customer demographics were also included to assist in segmenting the different types of customers.

In addition, the Working Group incorporated questions about the attitudes of customers to various issues that might be explored when selecting strategic directions. The full survey results are reported in Appendix 5.
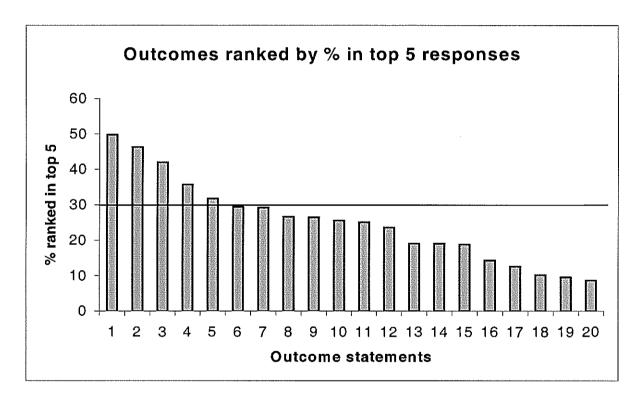
Figure 4. Ranking of outcomes on the basis of the percentage of responses placing the outcome in the top five. (Outcome statements are numbered as shown in Table 6).

In Figure 4, the series of twenty ranked Outcome Statements are presented in numerical order according to their ranking. The line indicates the relative strength of the top 5 outcome statements compared to the remaining fifteen. The actual statements used in the producer survey are presented in Table 6.

Rank	Outcome Statement
1	Know how to maximise beef production from the feed resources on your property
2	Know how to control and manage diseases and health problems affecting your cattle
3	Know how to maximise feed from your pastures without degrading the land
4	Have the business planning skills to maximise your return on investment
5	Have the knowledge and skills to adapt your production system to meet market specifications
6	Be confident that beef is recognised in the market place for its value for money
7	Have access to new pasture varieties and establishment technologies to improve cattle production and the environment on your farm
8	Know how to effectively use fertilisers and avoid adverse effects on the soil and water on your property
9	Know how to identify market specifications and trends for the cattle you produce
10	Know how to plan your property to balance production with the environment
11	Have the ability to continuously improve the genetics of your cattle
12	Be confident the industry supply chain post-farm gate is improving its efficiency
13	Understand how to control weeds, insect pests and vertebrate pests (eg. rabbits, foxes, kangaroos) on your property
14	Be confident that industry QA systems will help ensure growth of the markets for your products
15	Feel the wider community believe that beef producers responsibly manage environment and animal welfare issues
16	Be able to cost effectively meet all your production and environment QA requirements
17	Know how to monitor things like soil, water and bio-diversity so you can manage the impact of your beef operation on the environment
18	Understand the likely effects on your beef business of emerging environmental issues such as genetically modified organisms (GMOs), greenhouse gases, salinity and acidity
19	Have research results delivered in a way that suits your business and learning style
20	Know how to attract, develop and retain good quality staff

Table 6. Actual producer outcome statements, ranked from 1 to 20

The ranked outcome statements were grouped into four categories by the Working Group. Broadly these groupings cover the need to:

❖ Have the knowledge and skills to conduct a successful beef production system
❖ Produce a value for money product through access to key on-farm business inputs, information and skills
❖ Be able to assess the impact of off-farm influences on the beef business
❖ Have access to on-farm elements that will support and sustain the beef business for the future.

The ranked outcome statements that support each of these statements are presented in the four groupings.

♦ *"Have the knowledge and skills to conduct a successful beef production system"* included the following outcome statements:

Rank	Outcome Statement
1	Know how to maximise beef production from the feed resources on your property
2	Know how to control and manage diseases and health problems affecting your cattle
3	Know how to maximise feed from your pastures without degrading the land
4	Have the business planning skills to maximise your return on investment
5	Have the knowledge and skills to adapt your production system to meet market specifications

♦ *"Produce a value for money product through access to key on-farm business inputs, information and skills"* included the following outcome statements:

Rank	Outcome Statement
6	Be confident that beef is recognised in the market place for its value for money
7	Have access to new pasture varieties and establishment technologies to improve cattle production and the environment on your farm
8	Know how to effectively use fertilisers and avoid adverse effects on the soil and water on your property
9	Know how to identify market specifications and trends for the cattle you produce
10	Know how to plan your property to balance production with the environment
11	Have the ability to continuously improve the genetics of your cattle

♦ *"Be able to assess the impact of off-farm influences on the beef business"* included the following outcome statements:

Rank	Outcome Statement
12	Be confident the industry supply chain post-farm gate is improving its efficiency
13	Understand how to control weeds, insect pests and vertebrate pests (e.g. rabbits, foxes, kangaroos) on your property
14	Be confident that industry QA systems will help ensure growth of the markets for your products
15	Feel the wider community believe that beef producers responsibly manage environment and animal welfare issues

♦ *"Have access to on-farm elements that will support and sustain the beef business for the future"* included the following outcome statements:

Rank	Outcome Statement
16	Be able to cost effectively meet all your production and environment QA requirements
17	Know how to monitor things like soil, water and bio-diversity so you can manage the impact of your beef operation on the environment
18	Understand the likely effects on your beef business of emerging environmental issues such as genetically modified organisms (GMOs), greenhouse gases, salinity and acidity
19	Have research results delivered in a way that suits your business and learning style
20	Know how to attract, develop and retain good quality staff

Producers were also asked to rate their perception of the performance of the industry in satisfying these outcomes. Producers were on average satisfied with current outputs from R&D

to address the major on-farm issues. They were less satisfied with the efforts to improve marketing, off-farm efficiency and the cost of QA programs.

Although there were significant differences in the responses between the various segments, there was an **over-riding message** from the survey data that *producers are looking for improvements that will help them make more profit and that are proven to work.* This will influence future Program development and R&D investment decisions in the southern Australia beef industry.

4.2   Producer Outlook

In addition to the core of outcome questions, the Working Group incorporated questions about the attitudes of customers to various issues that could be explored in selecting strategic directions and included open-ended questions that provided respondents with an opportunity to contribute suggestions and other observations.

In the introductory statements, each respondent was advised that the Survey was being conducted on behalf of Meat & Livestock Australia (MLA) a levy payers' Company. It is interesting to note that in this random survey, just over half the producers surveyed (52%) claimed to be members of MLA as shown in Table 7.

MLA Membership	Producers surveyed (number)	Producers surveyed (%)
MLA members	241	51.8
Non MLA members	224	48.2
Total	**465**	**100.0**

Table 7. Breakdown of survey numbers by MLA membership

In a question relating to the option to use the technology of multi-breed Estimated Breeding Values, 63.7% of producers surveyed said that they would use these to make breeding decisions if they were available as shown in Table 8.

Multi-breed Estimated Breeding Values	Producers surveyed (number)	Producers surveyed (%)
Would use EBVs	296	63.7
Would not use EBVs	169	36.3
Total	**465**	**100.0**

Table 8. Producer attitudes to Multi-breed Estimated Breeding Values

In contrast, only 41.5% of producers could accurately put a $ figure on their cost of production as shown in Table 9.

Could put accurate $ figure on their cost of production	Producers surveyed (number)	Producers surveyed (%)
Could accurately cost production	193	41.5
Could not accurately cost	272	58.5
Total	**465**	**100.0**

Table 9. Producer attitudes to accurately costing their production

4.3. Producer Attitudes to Industry Issues

A secondary set of questions explored producer <u>attitudes</u> to specific issues such as:

- ❖ environmental and business issues including QA,
- ❖ relative importance to their business of different grazing management, nutritional and genetic techniques to improve productivity, and
- ❖ attitude to investment in R&D to improve on-farm businesses.

The major results of the survey on these questions were:

➤ Over 95% of producers believe the beef industry should invest more in convincing customers that beef is a healthy food.

➤ Most producers (85%) believe that certification and Quality Assurance will be required to ensure access to markets in the future.

➤ More than 70% of producers indicated that increasing biodiversity (of both flora and fauna) should be an important part of their property management.

➤ Producers are unsure that government environmental policy will adversely affect their business in the future (45% - Yes & 35% - No). Producers believe that they should be financially rewarded for implementing environmentally sustainable production practices (85%). Interestingly, over 30% of producers indicated that protecting the environment is more important to them than profit.

➤ On the farm business side, pasture productivity is recognised as the most important profit driver (>87%), but there are concerns that high stocking rates will increase problems with animal health (70%). Despite this concern about potential animal health problems, grazing management is seen as more effective than chemicals and other forms of biological control of weeds (64%).

➤ Producers have different views on the relative value of different technologies. Over half believe that animal nutrition is more important than genetics in achieving market specifications, but half also agree that cloning and gene technology will be important in the beef industry of the future.

➤ Better utilisation of technology is seen as important in tomorrow's beef industry. 80% of producers believe that application of technology will give them a market edge in the future, and new research is needed to identify new on-farm technologies.

➤ 60% of producers agree they should pay a commercial price for access to technology arising from MLA research.

➤ A significant proportion of producers (43% of those surveyed), believe that the cattle levee should be used for 'on-farm' Research and Development.

➤ 27% of producers surveyed indicated their willingness for the cattle levee to be used mainly for 'off-farm' research development and delivery.

4.4   Producer Responses to Open Ended Questions

Respondents also provided extensive comments in response to some open ended questions.

The top five answers to the *question "What do you think will be the biggest impact on the beef industry in the next ten years"* were:

1. Ensuring product integrity and quality (MSA)
2. Pressure on land use and impact on return on investment
3. Access to export markets
4. Better use of animal genetics
5. Control and management of endemic and exotic animal diseases

The top five answers to the *question "What changes would you like to implement that will have a big impact on your business"* were:

1. Improving my pasture base
2. Improving the genetics of my animals
3. Changing my business and production system
4. Increasing scale of operation
5. Smarter marketing (using feedback, EU, tuning the system)

The top five answers to the *question "What would it take to persuade you to adopt new on-farm practices"* were:

1. Profit from the proposed change
2. Proof that the change will work
3. The change will improve the sustainability of my farm
4. Cost effectiveness
5. Not much at all (open to change)

There was a clear message that research results need to be presented in a way that is understandable, informative and practical. There were some encouraging comments such as 'Get on with the job; do the best of your ability'.

5. R, D & E PROVIDER RESPONSES

5.1   *Provider and Stakeholder Market Research*

There are a range of R, D & E provider agencies and organisations servicing the southern Australia beef industry. Some of these are focused on State industry issues, while others have a more global view of the on-farm sector of the beef industry. Many of the approaches to industry link the production and environmental aspects of the beef business. The opinions of agency research and extension providers and other organisational stakeholders were canvassed in both the qualitative and quantitative surveys using a similar approach to the producer research.

The qualitative market research verbatim comments were collated in a report grouped under topic headings. In the quantitative there were 58 responses catagorised into 37 researcher, 13 information providers, and 8 managers. The majority of participants (57 out of a total of 58 in the survey) were from either State based or Commonwealth Government organisations.

The Research sector contributed the majority of respondents with 63.8% of the total; followed by Extension, 22.4% and Management 13.8%. The majority of those surveyed work in non-regulatory fields. The Private Consultant, Agribusiness and Education sectors were not surveyed.

The four most important outcomes for provider respondents were:

1. Encourage lateral thinking and innovation in project design, implementation and delivery
2. Ensure research outcomes are packaged in a format that can be easily delivered to producers
3. Provide clear directions on program objectives so that providers can provide for the future
4. Ensure appropriate information delivery is planned into projects at the start.

The other outcome statements included:

♦   Ensure sufficient numbers of skilled research and information deliverers will be available in the future
♦   Engender confidence in the transparency of project selection process
♦   Maximise the benefits of collaboration among researchers and information providers
♦   Provide security of on-going funding to focus on the job at hand
♦   Facilitate the submission of research and information delivery proposals
♦   Ensure the process of project monitoring and evaluation encourages continuous improvement.

Overall there was a high level of dissatisfaction with existing arrangements regarding the provision of services in the R, D & E provider sector supporting the southern beef industry (Figure 5).

SABP - Operations

	R&D Management (Min 7.0 / Max 14.1)	Research (Min 8.1 / Max 12.5)	Extension (Min 6.1 / Max 14.1)	Total (Min 7.7 / Max 12.0)	Satisfaction R&D Management	Satisfaction Research	Satisfaction Extension
e) Encourages lateral thinking and innovation in project design, development and	11.4	12.1	12.3	12.0	2.1	2.3	2.7
d) Ensures that research outcomes are packaged in a format that can be easily del	12.7	10.6	14.1	11.7	2.5	2.9	2.3
a) Gives clear directions on program objectives so that providers can plan for th	12.0	12.5	8.8	11.6	2.4	2.4	2.9
c) Ensures that appropriate information delivery is planned into projects from th	14.1	10.0	12.3	11.1	2.8	2.8	2.5
j) Ensures sufficient numbers of skilled research and information deliverers will	8.2	9.9	10.9	9.3	1.9	2.1	2.2
i) Maximises the benefits of collaboration among researchers and information prov	7.0	9.0	12.1	9.4	2.8	2.8	2.5
h) Provides you with security of ongoing funding so you can focus on the job in h	7.0	10.0	6.6	8.9	1.8	2.6	2.2
g) Ensures the process for project monitoring and evaluation encourages continuou	10.5	8.1	10.0	8.9	2.8	3.0	3.0
f) Engenders confidence by all concerned in the transparency of the project selec	8.6	9.6	6.7	8.8	1.9	2.1	2.8
b) Facilitates the submission of research and information delivery proposals	8.4	8.1	6.1	7.7	2.5	2.5	2.9

Figure 5: Summary of the ranking of R, D & E providers outcomes, and the present level of satisfaction with outcomes (satisfaction was rated from 1 low to 5 high).

Main response differences between different types of providers

There are substantial differences in ranking of outcomes between R, D & E managers, researchers and extension respondents:

♦ **Researchers** rank clear direction on program objectives as most important
♦ **Extension** rate having research outcomes packaged in a format that can be easily delivered as most important
♦ **Management** rate appropriate information delivery planned into projects at the start as the most important outcome

Researcher and extension providers believe the next most important outcome is to *encourage lateral thinking and innovation in project design implementation & delivery*.

Response to Open Ended Questions

Responses to the open-ended questions revealed strong feelings among the respondents on the following issues:

♦ *Research* - The inappropriateness of past R&D focus (should be more on feed base); tension within the R&D community about the value of non-replicated on-farm research; frustration with missed opportunity from basic and more innovative R&D; concern over lack

of support for whole farm / industry level modeling tools; and criticism of failure to support long-term strategic R&D.

♦ **Extension** - It is a clear that appropriate delivery should be planned into projects when they are being designed; R&D results need to be reported truthfully (to include both positive and negative results); there is increasing tension between methods of delivery (web v traditional); and R&D results should be delivered in context of whole farm rather than in isolation.

Stakeholder Issues

The Stakeholders surveyed raised the following issues they considered important to their partnering and collaboration in future R, D & E Programs.

1. Recognition is given to the contribution of all funding partners and collaborators
2. Investors confidentiality requirements are met
3. Relevant public and private interests have an equal opportunity to become partners and investors
4. Engender confidence to potential investors through appropriate consultation processes
5. Ensure that Intellectual Property (I P) is valued and recognised and that issues are resolved efficiently and fairly.

The challenge for the future Program is to build the confidence and capacity of the
R, D & E providers into an ongoing partnership with the Industry. The strong underlying message from the survey information is that currently this sector finds the present system uninviting. The overall attitude expressed by the respondents accurately reflects the general uneasiness and despondency that exists at the present time. It also highlights the need for a new, more transparent process of engaging with the 'service sector' of the southern Australia beef industry and to work with management towards a continuity of funding.

Researchers are calling for clear R&D directions and the freedom to set operational directions so that they can apply lateral thinking and innovation in Project design and implementation. Extension providers want packaged R&D outcomes that can be easily delivered to producers. The overall challenge for the future is to empower the providers to operate to their capacity and remain focused on R, D & E. This will play a major role in re-invigorating the beef industry of southern Australia.

Comparison of Provider and Producer Attitudes

The consistency and alignment of attitudes between Producers and R, D & E Providers is strong (see Chapter 6 for details). The providers have indicated they are willing to commit their efforts to achieving similar goals to the producers and it is the strength of the alignment that will help energise the R, D & E sector.

5.2 Unspoken Outcomes

The CD-MAP® process also involved identifying unspoken basic and excitement outcomes that might not have been identified from the market research. Basic outcomes are those that if they are not attended to could result in complaints and re-work. Excitement outcomes are added-value outcomes that could be delivered in the future to maintain and enhance customer satisfaction.

The Working Group identified 39 basic unspoken outcomes in areas such as stakeholder recognition, the project research and information delivery process, contingency plans for various emergencies, communication and people issues.

By nature, an R&D Program should produce unexpected breakthroughs that are of value to producers and are classified in the QFD process as 'excitement outcomes'. There were 17 potential unspoken excitement outcomes identified by the Working Group, with some being classified outside the Project boundary.

See Appendix 3 for the list of unspoken basic and excitement outcomes.

6. COMPARISON of PRODUCER and R, D & E PROVIDER ATTITUDES

Overall there is little difference in the responses to the Attitude Survey statements between the producers and the R, D & E Providers. This is shown in the following Tables that present the Attitude statements in clusters for:

- ♦ QA and Product Integrity
- ♦ Research, Development and Information Delivery
- ♦ Business and Production Systems
- ♦ Environmental Impact and Considerations

In both the producer and provider groups the respondents were asked to provide a rating of: Strongly Agree, Agree, Neutral, Disagree or Strongly Disagree to a series of statements. The rankings applied are: * 50-65%, ** 65-80%, *** >80% Agreement (A) or Disagreement (D) with the statements.

Based on this assessment, the following Tables 10 to 13 present the composition of attitude scores by producers and R, D & E providers.

Question	Producer		R, D & E Providers	
	A	D	A	D
The beef industry should invest in convincing consumers that beef is a healthy food	***		***	
The beef industry of the future will require QA and certification to maintain market access	***		***	

Table 10. Quality Assurance and Product Integrity

Question	Producer		R, D & E Providers	
	A	D	A	D
New research is needed to identify new on-farm technologies	***		***	
Using new on-farm technologies will give me a market edge in the future	**		***	
It is worthwhile investing in research to reduce the amount of feed consumed by cattle to turn off a set amount of beef	**		**	
Cloning and gene technologies will be important in the beef industry in the future	*		***	
Investing in plant breeding is more likely to improve my bottom line than an equivalent investment in animal breeding				*
The MLA levy should be used for on-farm rather than off-farm research, development and delivery				*
Users of MLA's research products should pay a commercial price for them	*			

Table 11. Research, Development and Information Delivery

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Question	Producer		R, D & E Providers	
	A	D	A	D
Pasture productivity is the most important business profit driver	***		*	
The most effective way to achieve market specifications on my property is to use cattle genetics rather than nutrition		*		*
Grazing management is more effective than chemical or insects for weed control	**			
High stocking rates increase animal health problems	**			
Producers that use supplementary feeding make more money				

Table 12. Business and Production Systems

Question	Producer		R, D & E Providers	
	A	D	A	D
I should be financially rewarded for environmentally sustainable beef production practices	***		**	
Increasing bio-diversity (flora and fauna) should be an important part of managing my property	**		**	
Planting more trees on my farm would improve my profitability		*		
Protecting the environment is more important to me than profit				
Government environmental policy will have a negative impact on my beef business in the future				

Table 13. Environmental Impact and Considerations

Discussion

➢ Strong agreement exists across all industry sectors that a major factor in future market access will be a quality assured production system delivering a healthy product to consumers.

➢ There is consistent agreement between producers and R, D & E providers about the role and impact of research on future beef production. The R, D & E providers have stronger opinions on the value of investing in plant breeding and off-farm research.

➢ Interestingly, producers have the strongest opinion that users should pay for information that benefits their business.

➢ There is general agreement about the importance of managing the breeding and feedbase to a profitable beef enterprise.

➢ Producers have a stronger view on the impact of management factors on their farm businesses.

➢ Opinion varies about the role and importance of supplementary feeding as a profitable management tool.

➤ There is strong alignment about the benefits and costs of responsible environmental management to the beef business. In particular, many producers believe that planting trees on their farm will impact negatively on profitability.

Conclusion

The consistency and alignment of attitudes between producers and R, D & E Providers is strong. The providers have indicated they are willing to commit their efforts to achieving similar goals to the producers and it is the strength of the alignment that will help energize the R, D & E sector.

The challenge for the future Program is to build the confidence and capacity of the R, D & E Providers into an ongoing partnership with the Industry. The strong underlying message from the survey information is that currently this sector finds the present system uninviting. The overall attitude expressed by the respondents accurately reflects the general uneasiness and despondency that exists at the present time. It also highlights the need for a new, more transparent process of engaging with the 'service sector' of the southern Australia beef industry and to work with management towards a continuity of funding.

Researchers are calling for clear R&D directions and the freedom to set operational directions so that they can apply lateral thinking and innovation in Project design and implementation. Extension providers want packaged R&D outcomes that can be easily delivered to producers. The overall challenge for the future is to empower the providers to operate to their capacity and remain focused on R, D & E. This will play a major role in re-invigorating the beef industry of southern Australia.

7. MARKET POSITIONING

7.1 Producer Market Positioning

The CD-MAP® QFD process involves analysing the raw market research data to resolve the 'front-end' and determine *exactly* where to focus major efforts and resources in the future. These decisions form the core of any planning strategy. The very core of strategy is market positioning because the overall corporate objectives can not be achieved if customer outcomes are not satisfied. The rest of strategy development involves strategic initiatives that 'enable' the market positioning to be achieved.

Market positioning means identifying exactly what improvements in customer perceptions are necessary on each outcome to deliver the overall Program goals. It considers:

* ❖ Customer priorities
* ❖ Customer performance perceptions
* ❖ Customer outcomes that might be emphasised in marketing communications

In marketing terms it is referred to as determining the 'value proposition' or the 'customer satisfaction ratings' if the survey were to be repeated in the future (Figure 6).
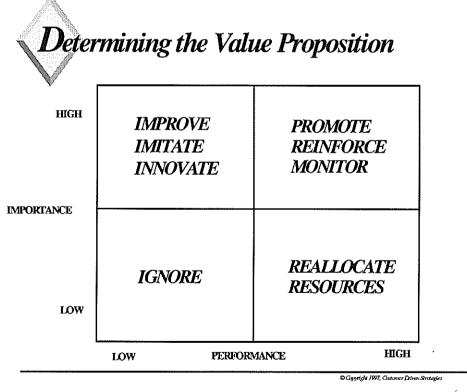
Figure 6. Description of components that make up the value proposition.

The process focused the Working Group's attention on those outcomes that are more important to *producers becoming more profitable*. It also focused on those areas that producers are less satisfied with in current industry performance.

In making decisions the Working Group needed to recognise those customer outcomes that were likely to become more important or have a greater impact in the future.

Market Communication

Another critical influence on the market positioning is the customer outcomes that would be emphasised in communications. It is necessary to ensure any outcomes that are to be emphasised in marketing communications are given a higher priority so the Program gains in credibility.

Effective market communication involves selecting one or two main areas as the major focus. The Working Group decided the main focus of marketing communication on the R, D & E Program would be the following producer outcomes:

❖ Know how to maximise beef production from the feed resources on your property
❖ Have the knowledge and skills to adapt your production system to market specifications.

Other subsidiary outcomes that would also be promoted in marketing communications include:

❖ Know how to maximise feed from your pastures without degrading the land
❖ Have the business planning skills to maximise your return on investment
❖ Be confident that beef is recognised in the marketplace for its value for money
❖ Know how to control and manage diseases and health problems affecting your cattle

The result of these decisions was a re-ordering of the outcome priorities as summarised in the following marketing positioning matrix presented in Figure 7.

SAB in the Future - Producers

	Average all southern Australia (465)	Improvement factor	Marketing Highlights	Total Importance	Importance %	Minimum Value = 1.4 Importance	Maximum Value = 13.8
e)Know how to maximise beef production from the feed resources on your property	49.7	1.2	1.5	89.5	13.8		
d)Know how to maximise feed from your pastures without degrading the land	41.7	1.2	1.2	60.0	9.3		
a)Know how to control & manage diseases & health problems affecting your cattle	46.3	1.1	1.2	58.9	9.1		
m)Have the business planning skills to maximise your return on investment	35.7	1.2	1.2	53.1	8.2		
i)Have the knowledge and skills to adapt your production system to market specs	29.1	1.1	1.5	49.8	7.7		
o)Be confident that beef is recognised in the market place for its value	31.3	1.1	1.2	40.6	6.3		
h)Know how to identify market specifications &trends for the cattle you produce	26.3	1.2	1.0	32.1	5.0		
c)Have access to new pasture varieties and establishment technologies to improve	28.9	1.1	1.0	31.2	4.8		
f)Know how to effectively use fertilisers and avoid adverse effects on the soil	26.3	1.1	1.0	29.5	4.5		
l)Know how to plan your property to balance production with the environment	25.4	1.1	1.0	28.4	4.4		
g)Have the ability to continuously improve the genetics of your cattle	25.0	1.1	1.0	26.5	4.1		
p)Be confident the industry supply chain post-farm-gate is improving effciency	23.3	1.1	1.0	25.6	4.0		
s)Feel the wider community believe that beef producers responsibly mge enviromt	18.5	1.1	1.2	24.4	3.8		
j)Be confident that industry QA systems will help ensure growth of the markets	18.7	1.1	1.0	20.2	3.1		
b)Understand how to control weeds, insect pests & vertebrate pests (e.g. rabbits	18.9	1.1	1.0	20.0	3.1		
k)Be able to cost effectively meet all your production and environment QA requrd	14.1	1.0	1.0	14.1	2.2		
q)Know how to monitor things like soil, water and bio-diversity	12.4	1.0	1.0	12.9	2.0		
r)Understand the likely effects on your beef business of emerging environmental	10.2	1.1	1.0	11.4	1.8		
t)Have research results delivered to suit your business & learning style	9.6	1.1	1.0	10.6	1.6		
n)Know how to attract, develop and retain good quality staff	8.7	1.1	1.0	9.2	1.4		

Figure 7. Producer outcomes ranked according to producer scores after adjustment for improvement and communication factors determined by the Working Group.

7.2   Provider and Stakeholder Market Positioning

A similar analysis was carried out with the providers of research, information delivery and other stakeholders (Figure 8). This aimed to identify those outcomes that need to be addressed to improve the efficiency of the management of R, D & E in the southern Australia beef industry and to address issues that are of concern to stakeholders.

SABP - Operations

	R&D Management	Research	Extension	Total	Improvement factor	Importance	Minimum Value = 8.2 Percentage importance	Maximum Value = 13.2
e)Encourages lateral thinking & innovation in projects	37.5	48.6	41.7	12.0	1.32	15.8		
a)Gives clear directions on program objectives	50.0	57.1	16.7	11.6	1.28	14.8		
j)Ensures sufficient numbers of skilled research & information deliverers	25.0	25.7	33.3	9.9	1.28	12.7		
d)Ensures research outcomes are packaged for easily delivery	37.5	32.4	75.0	11.7	1.06	12.4		
f)Engenders confidence in the transparency of project selection	25.0	25.7	8.3	8.8	1.34	11.8		
c)Ensures approp info delivery is planned into projects from the start	62.5	28.6	58.3	11.1	1.06	11.8		
i)Max benefits of collaboration among researchers & info providers	0.0	14.3	41.7	9.4	1.16	10.9		
h)Provides you with security of ongoing funding	12.5	31.4	8.3	8.9	1.12	10.0		
b)Facilitates submission of research and info delivery proposals	12.5	20.0	8.3	7.7	1.28	9.9		
g)Project monitoring & evaluation encourages continuous improvement	37.5	11.4	8.3	8.9	1.10	9.8		

Figure 8. R, D & E provider outcomes ranked according to scores from R & D managers, researchers and extension practitioners after adjustments established by the Working Group.

8. PREDICTIVE SUCCESS FACTORS for the NEW PROGRAM

In the CD-MAP® QFD process Predictive Success Factors (PSFs) are used to measure and control the performance capability in the delivery of the Program outcomes. An outline of the place of PSFs in the QFD process is presented in Figure 9.

PSFs are *lead* rather than *lag* indicators. Lead indicators focus attention on the areas needing improvement in order to improve customer satisfaction in the future. Lag indicators are measures that reflect past efforts.
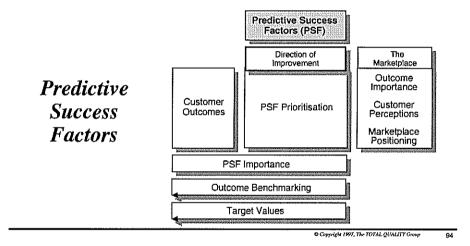
Figure 9. Place of Predictive Success Factors (PSFs) in the QFD process.

8.1 Producer PSFs for R,D & E Programs

The Working Group determined the PSFs using the CD-MAP® process (Appendix 4). The PSFs identify the 'activity areas' that will be put in place to ensure that the identified outcomes are achieved. For example, in an R, D & E Program to provide *'the knowledge and skills to optimise beef production systems'* the PSFs will ensure that producers have the knowledge and skills to maximise beef production from the feed resources on their property.

The Working Group also prioritised the PSFs based on the relationships between them and the outcomes that the PSFs help deliver as shown in Figures 10 and 11, which resulted in higher priority for the PSFs that were involved in the delivery of more than one outcome.

SAB in the Future - Producers

WHATs vs. HOWs Legend		
Strong	●	9
Moderate	○	3
Weak	△	1

Column headers (left to right):
- 2. Optimising Beef Production Systems
- 11. Planned RD&E into environmental sustainability and NRM
- 1. Planned RD&E on grazing management
- 8. Planned RD&E on data capture, management systems for continuous improvement
- 14. Planned RD&E on pasture species and agronomy
- 15. Planned RD&E program to improve business management skills
- 5. Planned RD&E program on delivery of market specifications, intelligence
- 7. Planned RD&E program into effective communication / delivery systems
- 4. Planned RD&E Beef Cattle Nutrition
- 12. Planned RD&E into coordinating on farm QA systems
- 3. Planned RD&E on genetic Improvement
- 10. Planned RD&E program into animal health and welfare
- 6. Planned RD&E program on risk analysis and management
- 16. Planned program into on-farm factors affecting eating quality
- 13. Planned RD&E on plant nutrition and fertiliser use
- 9. Planned RD&E program on developing applications of bio-technology

Outcome	2	11	1	8	14	15	5	7	4	12	3	10	6	16	13	9
e) Know how to maximise beef production from the feed resources on your property	○	△	○	△	△				○		△					
d) Know how to maximise feed from your pastures without degrading the land	△	△	○		△										△	
a) Know how to control & manage diseases & health problems affecting your cattle	△			△					△			○	△			
m) Have the business planning skills to maximise your return on investment	△			△		●	△	△								
i) Have the knowledge and skills to adapt your production system to market specs	●			△			△		△	△		△		△		
o) Be confident that beef is recognised in the market place for its value							△	△		△				○		
h) Know how to identify market specifications &trends for the cattle you produce				○					●							
c) Have access to new pasture varieties and establishment technologies to improve					●											
f) Know how to effectively use fertilisers and avoid adverse effects on the soil	△	△	△											△	○	
l) Know how to plan your property to balance production with the environment	○	○			△	△										
g) Have the ability to continuously improve the genetics of your cattle				○							●					△
p) Be confident the industry supply chain post-farm-gate is improving effciency				○			△	○								
s) Feel the wider community believe that beef producers responsibly mge enviromt	△	○								△						
j) Be confident that industry QA systems will help ensure growth of the markets				△						○		△				
b) Understand how to control weeds, insect pests & vertebrate pests (e.g. rabbits	○	○			△										△	○
k) Be able to cost effectively meet all your production and environment QA requrd	△									○		△				
q) Know how to monitor things like soil, water and bio-diversity	●			△												
r) Understand the likely effects on your beef business of emerging environmental	○											○				
t) Have research results delivered to suit your business & learning style								●								
n) Know how to attract, develop and retain good quality staff							○		△							

Figure 10. *Matrix of relationships between producer outcomes and PSF actions taken to achieve the outcomes.*
*(The strength of the relationship is shown as: **Strong (Dot** symbol) for PSFs contributing predominantly to achievement of outcomes, **Medium (Circle** symbol) are very important to outcome but not the major factor, **Weak (Triangle)** are only one of actions taken to achieve the outcome, **Blank** signifies that the relationship is not predictive).*

In discussion on actions to achieve the outcomes, the Working Group provided a considered weighting to arrange the PSFs in order of importance to producers
(Figure 11).

SAB in the Future — Producers

PSF	Percent
2. Optimising Beef Production Systems	14
11. Planned RD&E into environmental sustainability and NRM	10
1. Planned RD&E on grazing management	8.
8. Planned RD&E on data capture, management systems for continuous improvement	8.
14. Planned RD&E on pasture species and agronomy	8.
15. Planned RD&E program to improve business management skills	7.
5. Planned RD&E program on delivery of market specifications, intelligence	6.
7. Planned RD&E program into effective communication / delivery systems	5.
4. Planned RD&E Beef Cattle Nutrition	5.
12. Planned RD&E into coordinating on farm QA systems	5.
3. Planned RD&E on genetic Improvement	4.
10. Planned RD&E program into animal health and welfare	3.
6. Planned RD&E program on risk analysis and management	3.
16. Planned program into on-farm factors affecting eating quality	3.
13. Planned RD&E on plant nutrition and fertiliser use	3.
9. Planned RD&E program on developing applications of bio-technology	1.

Maximum Value = 14.9 — Percent

Minimum Value = 0.0

Figure 11. Predictive Success Factors (PSFs) ranked in priority order for producers

8.2 Provider PSFs for R, D & E Process Improvements

The Working Group also determined the PSFs required to manage R,D & E in the industry (Figure 12). These PSFs tended to measure process capabilities. Processes are powerful concepts and offer very effective means to manage and control activities. The roles and responsibilities involved in processes can be established. Activities involved in processes can be documented and the capability of processes measured and benchmarked. In this way the processes can be managed to ensure that improvements are delivered irrespective of individual personnel.

SABP — Operations

	Process for communication of strategic directions	Process for lateral thinking and innovation	Process for encouraging collaboration among researchers and information	Process for developing projects with info delivery planned in	Process for planning for future personnel requirements	Process for influencing RD&E industry & government funding policy	Process for timely project monitoring, evaluation, feedback & refinement	Process to communicate project selection criteria and feedback	Process to package research outcomes for easily delivery	Process for jointly developing RD&E program with funders & providers	Planned process to facilitate the submission of targeted proposals
Importance	11	11	10	10	10	9	9	9	8	7	7
Maximum Value = 11.0 —— Importance											
Minimum Value = 6.9											

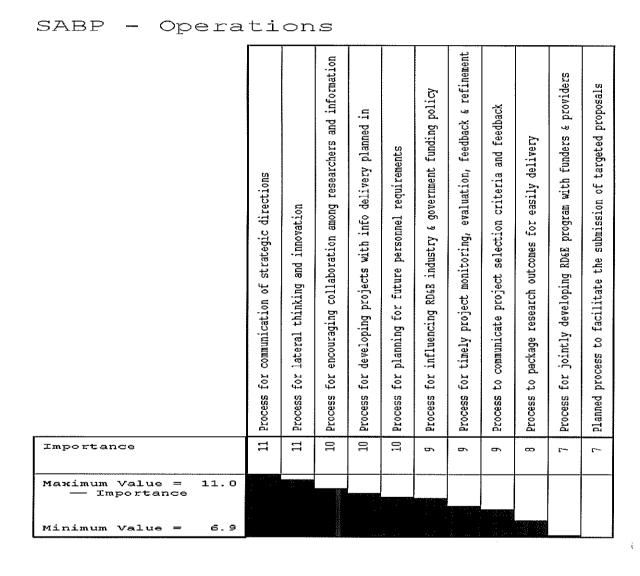*Figure 12. Predictive Success Factors (PSFs) in priority order for R, D & E providers*

8.3 Performance Benchmarking

Once PSFs are identified the capability and performance can be benchmarked. The first step is to identify current performance on each PSF and then establish target values for the performance improvements necessary to achieve the planned improvements in customer satisfaction on each outcome.

9. DEVELOPMENT & IMPLEMENTATION of the NEW PROGRAM

A Draft Report on the specific outputs from the CD-MAP® QFD process was presented to the Working Group in early February 2001. The Report was accepted in principle with suggestions to improve its readability and enhance its future use as both a planning and benchmarking document for the new Program.

Essentially Phase 1 in the development of the new Program for the on-farm sector of the southern Australia beef industry concluded at this meeting. The Working Group determined that its role was finished and that a new Implementation Team should be formed. The primary task for this new Team is to plan and develop the new Program and to oversee its implementation and operation from 1 July 2001.

The key tasks were identified as:

❖ Finalisation of the Consultant's Report on the CD-MAP® QFD Project

❖ Preparation of a Final Working Draft of the Working Group Report

❖ Compilation of a Summary Report for circulation to collaborating producers and providers

❖ Communication with the southern Australia beef industry through publication of the results in MLA Feedback magazine

❖ Preparation of a Draft Business Plan for presentation to SABRAC (February 2001)

❖ Presentation of the SABRAC endorsed Draft Business Plan for presentation to the MLA Board (March 2001)

❖ Extensive consultation with R,D & E providers and other industry stakeholders seeking input into the Draft Business Plan

❖ Appointment of an Implementation Team for the Southern Australia Beef Program

❖ Appointment of Sub-Program Co-ordinators for the new Program

❖ Preparation of an R&D Prospectus for each Sub-Program, seeking collaboration and investment partnerships for the new Program

❖ Commence implementation of the new Program, from 1 July 2001

❖ New southern Australia Beef Program conducted from 1 July 2001 to 30 June 2006.

APPENDICES

Appendix 1   Quotes from Producer Qualitative Research

Appendix 2   Quotes from R, D & E Provider Qualitative Research

Appendix 3   Unspoken Basic and Excitement Outcomes

Appendix 4   Predictive Success Factors (PSFs)

Appendix 5 QFD Process Producer Research Results
Categorised by:

❖   Overall total by specialist beef producers mixed business and small, medium & large categories
❖   Business size within specialists mixed categories
❖   State
❖   Enterprise (Breeder, Finisher, Backgrounder, Lot feeder, Dairy)
❖   By gender, Western Australia - split north or south of Perth
❖   All age categories
❖   Old / young age classes, attitude to use of EVBs and knowledge of test of production
❖   MLA membership
❖   NSW split north or south of Dubbo, South Australia south east compared with the rest of South Australia

Appendix 6 QFD Process Provider and Stakeholder Research Results
Categorised by:

R, D & E provider Respondents
❖   Role and organisation
❖   Attitude
❖   Importance of outcomes
❖   Satisfaction with outcomes

Stakeholder responses

Appendix 7 Producer Quantitative Survey Questionnaire

Appendix 8 R, D & E Provider Quantitative Survey Questionnaire

Appendix 1 – Quotes from Producer Qualitative Research

The following are *'typical quotations'* grouped by each of the main producer outcomes. The complete report on the qualitative research is available for future strategic and operational planning.

1. Have the knowledge and skills to conduct a successful beef production system

- "Macro long term industry involves satisfying the ultimate customer. So we need supply chains that have integrity and supply a quality product. Our farm is like a factory!

- We need to go to the market and then structure operations to meet needs. Should know our markets better. The problem for many producers is that when they sell the cattle that is the last they hear about them.

- Even with top genetics it is the quality of feed that contributes the most to quality of product that is turned off.

- The most important area is long haul research into the overall loss of the environment and to develop cost effective grazing systems that are sustainable in all the different climates in Australia.

- PROGRAZE was a huge influence on our farm in terms of feed budgeting and pasture utilisation. My focus is on kilos of dry matter each animal requires and how much is available.

- Parasite control is very important - prevention rather than cure.

- Bovine Johnes disease is a sleeper and a hot potato......... but it is difficult to test for!

- I think we can get a substantial increase in pasture production which relates to profitability within 12-18 months.

- Heavily into sustainable grazing systems. It is more than rotational grazing, we have mobs moving every day and most moving every couple of days. It comes down to pasture utilisation per acre per year.. More extension is needed on pasture management.

- PROGRAZE has been very successful for many properties. Pasture management is how to switch on and grow more feed if you need it. My biggest criticism of PROGRAZE is that it doesn't push producers and is not confronting enough. Many who have done PROGRAZE have not changed their practices at all.

- Pasture growth is the most basic aspect. I am going to minimise cost by having 60-70% of the potential stock and lower costs because I think it is better not to spend unnecessarily.

- We beef farmers have not understood pastures. Dairy farmers have a good grip on it so educating producers is a major challenge.

- Risk management, including safety, environment and financial risk is not managed well by many farmers.

- Business management is ongoing and needs to be addressed by producers. MLA could help producers in financial risk management ie. use of futures & forward contracts. If there were a system whereby producers could have forward contracts to supply certain types of product at certain times in the year, it would make our production systems more efficient.

- Succession planning is critical and is an issue that many people need help on. It should be part of professional development.

- We need more educating of producers to be able to analyse and understand where they can make it more efficient.

♦ In production efficiency you need the lowest costs of production which means spending money cleverly on genetics, pasture management and personal training to bring about change. It means learning how to do it and making sure that everyone in the team understands.

♦ MLA should get involved in developing systems to provide feedback to producers. The real market signals are not getting back to the producer.

♦ Research should be directed to improving the efficiency of the production chain from birth to retail market".

2. Produce a value for money product through access to key on-farm business inputs, information and skills

♦ "Beef is an old industry but is changing rapidly and some of the changes are going to be dramatic in the future. We depend so much on exporting and export markets with our domestic markets relying on quality.

♦ I think MSA is a good thing showing an industry that is trying to produce product with an eating quality that is what the customer wants and is willing to pay for – but it is not for us.

♦ What can best benefit the Region is research on the improvement of cultivars and the conversion into kilos of product in a most efficient manner for a 30 inch rainfall area.

♦ Needs to be more research on trial grazing of different cultivars of grasses with different classes of livestock so we can find the best performing cultivars which give the greatest kilos of meat produced per kilo of dry matter.

♦ We are missing good perennial winter grasses that will handle the low rainfall alternatives. We have tried most but they don't persist and can't handle the heat and drought in a rangeland environment, marginal country.

♦ MLA should be educating producers on the benefits of planting trees and the benefits in terms of increased production and protection from the sun and the cold winds.

♦ If you can't work out the Estimated Breeding Values (EBVs) there is something wrong with you. It is not that hard **once** you know what you have to produce.

♦ Farm planning and business planning is great. It involves financial as well as farm layout planning and how to handle the pastures and the land resource.

♦ Farm planning is about balancing all the components of the farm system, including the financial. This is the most important area for producers – without it they are a ship with no direction!

♦ Animal genetics and selection is important for continual progression forwards in terms of better performance, weight gain, carcase specs, calving, live calves on the ground and ultimately the optimum dollar.

♦ We only buy bulls that have Breed Plan figures and in theory this tells us what the growth rate, milking ability, fertility etc.

♦ Calving and weaning; genetics and animal husbandry; and general management are the issues.

♦ The most important thing to aim for is reproduction rate. There is no profit in dead calves.

♦ We don't want to get into the GMO or cloning debate, but artificial insemination allows you to quickly boost genetics".

3. Be able to assess the impact of off-farm influences on the beef business

♦ "Food safety has to be right through the chain. The export processors are good and the domestic processors also have to be.

♦ Should get the domestic market fixed up first. MSA only addresses the top 10% of the market that does not need it. The problem is inconsistent product – steak is not steak where as chicken is always chicken.

♦ We want truth in labeling for cow meat. MSA are half way and want a Code of Practice. MSA will solve the problem of accurate description of beef cuts when it becomes more widely adopted.

♦ Certain processors and retailers have not been prepared to adopt MSA and instead have their own branded product. MSA should underpin all those branded products.

♦ There is a potential to use less chemicals so we can produce a natural product.

♦ Integrity and cleanliness of products should be taken for granted and programs in place to ensure we are clean and green. We are not Cattle Care accredited but as soon as we see a commercial advantage we will be in it tomorrow.

♦ From the consumer point of view the product must be clean and have environmental management.

♦ Environmental issues affect the industry and how the consumer perceives our product. Public relations and producer education is needed on environmental issues. We need to be ready for the wider community views on the environment, animal welfare and land degradation issues.

♦ We have to be lean green and clean. Education of children in the cities is important with the benefits of beef based on accurate data, quick and easy preparation".

4. Have access to on-farm elements that will support and sustain the beef business for the future

♦ "There are all these different approaches (EU, Chemical Care, Cattle Care, Johnes Disease, Flockcare etc). Why can't we have a combined co-ordinated approach on quality assurance and not five different systems to follow.

♦ Resource management and the environmental issues, including trees and wildlife are all areas for research and are legitimately part of the MLA scope.

♦ Genetic marker work is world class and is good. We have researched pastures to death.

♦ As far as the technical side is concerned, the time lag from completion of research to getting into the field is 15 years. My concern is that we do the technical side exceptionally well but the producer wants to see results that add to the bottom line within a 12 to 18 month period.

♦ Getting research out to producers is the problem. Part of the research project should be to see it put on a commercial farm. Make sure research findings are readily available to private and industry consultants.

♦ If we see the benefits of any research we utilise it. How do you communicate benefits?

♦ Pasture type and production is the area that needs more extension. Not enough research is getting back to producers.

♦ Extension in the past piecemeal, not fitting into whole farm and doesn't explain the effect on other areas eg a change in time of calving.

♦ MLA needs to concentrate on extension to help with adoption. To increase adoption you have got to have good extension.

♦ I rely heavily on MLA to point the direction and provide the background research papers on situations. Without MLA it would be a stab in the dark – so what you are doing is important.

- Attracting and retaining staff is a big issue for me. The average wage for a farm worker is not good but we are not able to sustain high wages. If you use contractors, they might give you flexibility but not loyalty.
- Staff is the biggest concern and setting up a career path for young people who want to stay is difficult".

Appendix 2 – Quotes from R, D & E Provider Qualitative Research

The Qualitative research task for RD&E providers adopted a similar approach to that with producers except here the emphasis was on the improvements to the management processes involved in initiating, developing, selecting, monitoring and re-directing RD&E projects.

To assist in setting on-farm R D&E priorities for the next 5 to 10 years, a range of 28 providers (researchers, information deliverers and their managers currently working in the southern Australia beef industry) were surveyed for their views on the outcomes and benefits that will impact on their RD&E operations. The report on the responses of the providers from this qualitative phase of the Project is available. The following are *'typical quotations'.*

1. Researchers

- ♦ "We must make certain that we focus research on issues over which we can have an impact. It is extremely important we maximise research into areas over which farmers can influence and minimise research where they have no influence ie. attempts to increase prices.
- ♦ The process of Project selection is not transparent. A symptom of this is that the deadline is very short and not very well advertised. There is little or no response to Tender Applications.
- ♦ Transparency would be aided by cost-benefit studies that the users of the technology had input into ie. producer groups and industry interface people.
- ♦ The more complex, mysterious and challenging the problem, the more basic research is needed. There needs to be a portfolio of both applied and basic research.
- ♦ It is important to encourage applied research in the commercial environment that is closer to production. The commercial environment is different in terms of the physical and human factors that are involved.
- ♦ There is concern the people in the industry will address the 'now' problems and not the next generation of research. There is a question about whether everything should be market driven, market pull or some technology push.
- ♦ MLA needs a system for identifying those research individuals who can provide value for money.
- ♦ Foster open communication within the research community. There needs to be a balance between competitiveness being a driver for innovation and efficiency vs co-location and collaboration to generate critical mass and combinations of core competencies.
- ♦ There needs to be a process for fast tracking small independent and innovative Projects, not necessarily part of major pushes.
- ♦ The practical biology of bovine research requires longer than six years unless it is a one-off disease problem or food safety. Conception to slaughter takes six years.
- ♦ The main issues are the links between the research and extension at the design phase. It is the relationship with extension which should be more strongly attached and more closely involved in the research design
- ♦ Any research Project must have a technology transfer written in, funded and refereed by external people who specialise in technology transfer".

2 Information providers (extension)

- ♦ "MLA has very talented research people but extension has been a second-class citizen or not part of their Corporate structure – they rely on Departments of Agriculture.
- ♦ Extension is a more demanding discipline than many research people give credit for. How to translate research into plain understandable language is a challenge. How to package and present the information is still the key!

- Extension now is negotiation and facilitation, getting groups of producers to identify needs and a common goal and then bringing parties together.
- There is probably more former extension officers out in private industry than there are current. These are very experienced people in the industry and could be used to guide the extension approach, but are not utilised.
- Start to get a whole of business focus rather than throwing independent chunks of information that producers are expected to digest".

3 Managers of R, D & E

- "Our business is providing technology and innovation underpinning opportunities in industry. We have developed a capability over the years that needs to continually reposition itself to meet changing community needs, including a shift from public to private sector funding.
- Need core funding to keep people and maintain research leadership. We have in excess of 50% of our people on Contract.
- The maintenance of core capabilities, physical assets and infrastructure eg. laboratories, needs to be funded.
- The great dilemma for research planning is the speed of change in the global environment and the need for the industry development and their service providers to be able to respond. There is a need for agility, focus and speed in the industry!
- There is increased funding pressure as we are becoming more independent of government funding. Governments want to see practical outcomes so the pressure is to do applied rather than basic research.
- MLA portfolio management contributes to create a dysfunctional competitive environment based on the purchaser - provider model when there should be a partnership model.
- One of the core strengths of MLA should be national co-ordination - co-ordination across institutions and a willingness to fund co-ordinated Projects. Encourage effective collaboration is the mantra!
- MLA, give us a clear list of priorities for R&D so we can merge that with complementary arrangements for funding.
- Collaborative groups such as CRCs should be supported by MLA. It adds value to their investment and provides existing networks.
- One of the great benefits of the CRC is its time frame of 6-7 years guaranteed funding and locked in resources. Shorter time frames result in an over-emphasis on short-term, high input research.
- We have a lack of capability in extension services and to fix it we need to make research into products, make it attractive to people to deliver and have producers paying for it.
- Broadly all stakeholders want equity in the Intellectual Property and MLA has to be cognisant of that. We have to demonstrate responsible exploitation of IP on behalf of industry and a common sense approach to the balance between royalty return vs maximising uptake.
- The six most powerful people in R, D&E may be the six National Purchasing Managers of the supermarkets".

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Appendix 3 - Unspoken Basic and Excitement Outcomes

These were identified by the Working Group and are described as 'Unspoken Basic' and 'Excitement' Outcomes that may not have been identified from the direct Market Research

3.1 Potential Unspoken Basic Outcomes

Stakeholder Issues

1.   To give due recognition to all funders and collaborators
2.   Meet investors confidentiality requirements
3.   Ensure that relevant private and public interests have the opportunity to invest appropriately
4.   Give confidence to all potential investors by appropriate consultation
5.   Ensure IP issues are resolved as quickly as possible
6.   Ensure IP protection of Australia's legitimate interests and ROI from commercialisation internationally
7.   Ensure all IP contributions of the internal providers are correctly valued and recognised

Project Research and Information Delivery Process

8.   The approach to research and information delivery should be rationalised, simplified and coordinated between agencies
9.   Eliminate unnecessary overlap of R&D and information delivery sites/facilities
10.   Ensure that R&D methodologies are soundly designed and applied
11.   Allow people to be free to innovate in research design and delivery of information
12.   To have the ability for scientists to freely exchange ideas with international colleagues
13.   To have an R&D project initiation and approval system / process that works in a timely fashion
14.   To make sure that MLA contract payments are made in accordance with milestone delivery
15.   Ensure there are realistic cost benefit studies in project assessment
16.   Ensure that there is an M&E process in place that permits refocusing of R&D projects and information delivery

Contingency Plans

17.   Have risk management for future market access problems eg. TSEs
18.   Ensure food safety is paramount at all times eg. TSEs
19.   Manage the public perception of technological threats eg. GMOs
20.   Animal welfare codes are adhered to
21.   To have OH&S regulations adhered to
22.   Effective disaster management plans, flood, fire, foot & mouth
23.   To have a plan in place to handle malicious attacks on the beef industry
24.   Have due regard for indigenous values
25.   Meet environmental resource management and emission guidelines
26.   To maintain the right to farm and have a positive public attitude to the beef industry
27.   Develop the appropriate tools to protect and enhance the environment
28.   Help provide accurate data on environmental issues to all the relevant parties raising the level of the debate

Information Delivery and Communication

29.   Ensure past R&D results are readily accessible
30.   That information is customised to meet the needs of the target audiences
31.   That there are minimum standards met in information delivery ie. content correct
32.   There needs to be an emphasis on quality of information delivery as well as the content
33.   Promote adequate Internet delivery facilities in rural areas
34.   To ensure that information delivery on similar issues is consistent, linked and coordinated
35.   Develop a process to enable producers to gain the confidence to implement technologies
36.   To have specialist advisors eg. economists, vets etc understand holistic issues in producer decision making

People

37.   Enhance staff morale
38.   To have a beef industry that has an attractive career path for young people
39.   Encourage the people management skills necessary to maintain a productive workforce

3.2 Potential Unspoken Excitement Outcomes

Producers

1. To gain time and efficiency in the beef industry through using an effective and reliable stock ID and tracking system
2. To have the knowledge, skills and a set of decision making tools and pathways to enable breakthrough strategies for producers
3. Producers automatically get reliable feedback on compliance to specifications
4. Ensure the product always meets consumer expectations of quality and safety
5. Provide a means for producers to get the answer to their questions when needed
6. That producers get a premium and better market access from involvement in on farm QA systems
7. The grass that grows in my pasture would kill Vulpia and be nutritious
8. To promote the beef industry as being vibrant, viable and of value to the wider community
9. Have a range of "sexy" beef products eg. better packaged, low fat meat, etc (#)
10. To develop new, non traditional products from cattle eg. co-products (#)
11. To have the ability to select cattle that are resistant to parasites and diseases
12. To have novel delivery methods for anthelmintics etc.
13. To reduce the generation interval for cattle breeding

(#) Outside the current portfolio

Internal

14. Make MLA membership a must do
15. To have a national library of all relevant R&D journals available to all providers
16. To have easy pathways to commercialise exciting R&D outputs
17. Achieve a breakthrough in the decision making capability of R, D & E providers

Appendix 4 - Predictive Success Factors (PSFs)

The range of Predictive Success Factors (PSFs) that were identified by the Working Group for inclusion in a future Program for the southern Australia beef industry, on-farm sector.

4.1   PSFs to achieve outcomes desired by producers

❖ Planned R, D & E program on optimising beef production systems
❖ Planned R, D & E program into environmental sustainability and natural resource management
❖ Planned R&D projects on data capture, management systems for continuous improvement and feedback
❖ Planned R, D & E on pasture species and agronomy
❖ Planned R, D & E projects on grazing management
❖ Planned R, D & E program into effective communication / delivery systems with producers, industry & community
❖ Planned D&E program to improve business management skills
❖ Planned D&E program on delivery of market specifications, intelligence & trends & developing strategies
❖ Planned R, D & E into coordinating on farm QA systems
❖ Planned R, D & E projects on risk analysis and management
❖ Planned R, D & E on genetic improvement
❖ Planned R, D & E into beef cattle nutrition
❖ Planned R, D & E on plant nutrition and fertiliser use
❖ Planned R, D & E projects into on-farm factors affecting eating quality
❖ Planned R, D & E projects into animal health and welfare
❖ Planned R, D & E projects on developing applications of bio-technology

4.2   PSFs to achieve outcomes desired by R, D & E Providers

❖ Planned communication process on strategic directions
❖ Planned process for lateral thinking and innovation eg. by encouraging inputs from others outside the mainstream discipline
❖ Planned process for encouraging collaboration among researchers and information providers
❖ Planned process for developing projects that include a comprehensive plan for information delivery
❖ Planned process for HR planning for future requirements, including recruitment and training
❖ Planned process for influencing R, D & E funding policy at industry and government levels
❖ Planned process for timely monitoring, evaluation, feedback and refinement of projects
❖ Planned process to communicate selection criteria and reasons why projects are selected
❖ Planned process to package research outcomes in a format that can be easily delivered to producers
❖ Planned process for jointly developing R, D & E program with funders and providers
❖ Planned process to facilitate the submission of targeted proposals

4.3   PSFs to achieve the outcomes desired by stakeholders

❖ Encourage an increase in the rate of adoption of research outcomes
❖ Enable $ on applied research to maximise the benefits from available knowledge
❖ Increase $ co-investment
❖ Increase $ on fundamental research that may yield long term benefits
❖ Reduce $ spent on unnecessary duplication of R, D & E
❖ Increase % of planned core R, D & E capabilities needed to respond in the future

❖ Increase % research and information delivery programs with comprehensive consideration of economic, environmental and social aspects
❖ Increase % of industry in strategic partnerships and collaboration
❖ Increase % satisfaction of stakeholder organisations with recognition of their contributions.

Appendix 5 QFD Process Producer Research Results

Categorised by:

* ❖ Overall total by specialist beef producers mixed business and small, medium & large categories
* ❖ Business size within specialists mixed categories
* ❖ State
* ❖ Enterprise (Breeder, Finisher, Backgrounder, Lot feeder, Dairy)
* ❖ By gender, Western Australia - split north or south of Perth
* ❖ All age categories
* ❖ Old / young age classes, attitude to use of EVBs and knowledge of test of production
* ❖ MLA membership
* ❖ NSW split north or south of Dubbo, South Australia south east compared with the rest of South Australia.

Southern Australian Beef Industry - Producer Survey

	Total		Beef		Mixed		Small		Medium		Large	
	#	%	#	%	#	%	#	%	#	%	#	%
Number	465		219		246		312		84		69	
80% or more Income from beef												
Yes	219	47.1%	219	100.0%	0	0.0%	137	43.9%	36	42.9%	46	66.7%
No	246	52.9%	0	0.0%	246	100.0%	175	56.1%	48	57.1%	23	33.3%
Total	465	100.0%	219	100.0%	246	100.0%	312	100.0%	84	100.0%	69	100.0%
Gross income from beef												
Less than $100,000	312	67.1%	137	62.6%	175	71.1%	312	100.0%	0	0.0%	0	0.0%
Between $100k and $200k	84	18.1%	36	16.4%	48	19.5%	0	0.0%	84	100.0%	0	0.0%
Over $200,000	69	14.8%	46	21.0%	23	9.3%	0	0.0%	0	0.0%	69	100.0%
Total	465	100.0%	219	100.0%	246	100.0%	312	100.0%	84	100.0%	69	100.0%
Category												
Small Beef	137	29.5%	137	62.6%	0	0.0%	137	43.9%	0	0.0%	0	0.0%
Medium Beef	36	7.7%	36	16.4%	0	0.0%	0	0.0%	36	42.9%	0	0.0%
Large Beef	46	9.9%	46	21.0%	0	0.0%	0	0.0%	0	0.0%	46	66.7%
Small Mixed	175	37.6%	0	0.0%	175	71.1%	175	56.1%	0	0.0%	0	0.0%
Medium Mixed	48	10.3%	0	0.0%	48	19.5%	0	0.0%	48	57.1%	0	0.0%
Large Mixed	23	4.9%	0	0.0%	23	9.3%	0	0.0%	0	0.0%	23	33.3%
Total	465	100.0%	219	100.0%	246	100.0%	312	100.0%	84	100.0%	69	100.0%
State												
NSW - NORTH	119	25.6%	40	18.3%	37	15.0%	37	11.9%	14	16.7%	26	37.7%
NSW - SOUTH	13	2.8%	27	12.3%	28	11.4%	35	11.2%	7	8.3%	13	18.8%
SA - SOUTH EAST	55	11.8%	10	4.6%	29	11.8%	30	9.6%	6	7.1%	3	4.3%
SA - THE REST			3	1.4%	13	5.3%	7	2.2%	5	6.0%	4	5.8%
TAS	97	20.9%	54	24.7%	43	17.5%	78	25.0%	17	20.2%	2	2.9%
VIC	92	19.8%	51	23.3%	41	16.7%	61	19.6%	19	22.6%	12	17.4%
WA - NORTH	44	9.5%	11	5.0%	33	13.4%	32	10.3%	8	9.5%	4	5.8%
WA - SOUTH	45	9.7%	23	10.5%	22	8.9%	32	10.3%	8	9.5%	5	7.2%
Total	465	100.0%	219	100.0%	246	100.0%	312	100.0%	84	100.0%	69	100.0%

Southern Australian Beef Industry - Producer Survey

		Total		Beef		Mixed		Small		Medium		Large
	#	%	#	%	#	%	#	%	#	%	#	%
Principal beef business												
Breeder	360	77.4%	160	73.1%	200	81.3%	240	76.9%	67	79.8%	53	76.8%
Finisher	76	16.3%	46	21.0%	30	12.2%	50	16.0%	13	15.5%	13	18.8%
Backgrounder	9	1.9%	7	3.2%	2	0.8%	8	2.6%	0	0.0%	1	1.4%
Lot Feeder	7	1.5%	3	1.4%	4	1.6%	4	1.3%	3	3.6%	0	0.0%
Dairy	13	2.8%	3	1.4%	10	4.1%	10	3.2%	1	1.2%	2	2.9%
Total	465	100.0%	219	100.0%	246	100.0%	312	100.0%	84	100.0%	69	100.0%
Gender												
Male	364	78.3%	169	77.2%	195	79.3%	229	73.4%	74	88.1%	61	88.4%
Female	101	21.7%	50	22.8%	51	20.7%	83	26.6%	10	11.9%	8	11.6%
Total	465	100.0%	219	100.0%	246	100.0%	312	100.0%	84	100.0%	69	100.0%
Age												
Less than 20	2	0.4%	1	0.5%	1	0.4%	2	0.6%	0	0.0%	0	0.0%
20-39	69	14.8%	27	12.3%	42	17.1%	43	13.8%	12	14.3%	14	20.3%
40-49	118	25.4%	52	23.7%	66	26.8%	75	24.0%	19	22.6%	24	34.8%
50-59	159	34.2%	76	34.7%	83	33.7%	103	33.0%	29	34.5%	27	39.1%
60-74	99	21.3%	53	24.2%	46	18.7%	76	24.4%	19	22.6%	4	5.8%
75 and over	18	3.9%	10	4.6%	8	3.3%	13	4.2%	5	6.0%	0	0.0%
Total	465	100.0%	219	100.0%	246	100.0%	312	100.0%	84	100.0%	69	100.0%
Others Involved in Decision Making												
Spouse	257	59.8%	123	63.1%	134	57.0%	182	67.7%	42	51.9%	33	41.3%
Parents	33	7.7%	13	6.7%	20	8.5%	14	5.2%	10	12.3%	9	11.3%
Siblings	40	9.3%	17	8.7%	23	9.8%	19	7.1%	10	12.3%	11	13.8%
Business Partner	9	2.1%	5	2.6%	4	1.7%	3	1.1%	1	1.2%	5	6.3%
Other (Children)	91	21.2%	37	19.0%	54	23.0%	51	19.0%	18	22.2%	22	27.5%
Total	430	100.0%	195	100.0%	235	100.0%	269	100.0%	81	100.0%	80	100.0%

Southern Australian Beef Industry - Producer Survey

	Total		Beef		Mixed		Small		Medium		Large	
	#	%	#	%	#	%	#	%	#	%	#	%
Property size (hectares)												
Average	12586		24430		2000		838		2521		78922	
Median	440		263		688		215		833		2000	
Std Dev	232143		337881		4735		3064		6494		605868	
Average annual rainfall (mm)												
Average	754		827		693		744		784		759	
Median	750		800		700		750		766		711	
Std Dev	304		329		267		281		227		444	
Total number of cattle												
Average	538		695		399		163		605		2145	
Median	180		200		160		100		485		1200	
Std Dev	1805		2535		641		178		511		4290	
Would use EBVs												
Yes	296	63.7%	139	63.5%	157	63.8%	184	59.0%	60	71.4%	52	75.4%
No	169	36.3%	80	36.5%	89	36.2%	128	41.0%	24	28.6%	17	24.6%
	465	100.0%	219	100.0%	246	100.0%	312	100.0%	84	100.0%	69	100.0%
Accurate cost												
Yes	193	41.5%	91	41.6%	102	41.5%	110	35.3%	40	47.6%	43	62.3%
No	272	58.5%	128	58.4%	144	58.5%	202	64.7%	44	52.4%	26	37.7%
	465	100.0%	219	100.0%	246	100.0%	312	100.0%	84	100.0%	69	100.0%
Q4. MLA member												
Yes	241	51.8%	109	49.8%	132	53.7%	127	40.7%	58	69.0%	56	81.2%
No	224	48.2%	110	50.2%	114	46.3%	185	59.3%	26	31.0%	13	18.8%
	465	100.0%	219	100.0%	246	100.0%	312	100.0%	84	100.0%	69	100.0%

Southern Australian Beef Industry - Producer Survey

ATTITUDES	Total		Beef		Mixed		Small		Medium		Large	
	#	%	#	%	#	%	#	%	#	%	#	%
	A&SA%	D&SD%	A&SA%	D&SD%	A&SA%	D&SD%	A&SA%	D&SD%	A&SA%	D&SD%	A&SA%	D&SD%
1. Cloning and gene technologies will be important in the beef industry in the	51.6%	29.2%	50.2%	29.2%	52.8%	29.3%	50.6%	30.1%	53.6%	26.2%	53.6%	29.0%
2. The most effective way to achieve market specifications on my property is to use cattle	25.4%	49.5%	25.1%	49.3%	25.6%	49.6%	25.6%	50.6%	27.4%	42.9%	21.7%	52.2%
3. Producers that use supplementary feeding make more money	41.9%	40.4%	40.6%	41.1%	43.1%	39.8%	44.2%	38.5%	34.5%	45.2%	40.6%	43.5%
4. Investing in plant breeding is more likely to improve my bottom line than an equivalent	37.8%	34.6%	36.1%	36.5%	39.4%	32.9%	37.8%	34.3%	36.9%	35.7%	39.1%	34.8%
5. Grazing management is more effective than chemical or insects for weed control	64.3%	23.4%	66.7%	23.7%	62.2%	23.2%	65.1%	23.7%	66.7%	19.0%	58.0%	27.5%
6. Pasture productivity is the most important business profit driver	87.1%	6.0%	92.2%	2.3%	82.5%	9.3%	86.2%	5.1%	90.5%	7.1%	87.0%	8.7%
7. High stocking rates increase animal health problems	72.5%	21.1%	72.1%	21.0%	72.8%	21.1%	72.4%	20.2%	79.8%	17.9%	63.8%	29.0%
8. Planting more trees on my farm would improve my profitability	40.4%	47.5%	41.1%	47.9%	39.8%	47.2%	38.8%	49.0%	52.4%	40.5%	33.3%	49.3%
9. I should be financially rewarded for environmentally sustainable beef production	84.7%	8.8%	84.5%	9.1%	85.0%	8.5%	85.3%	9.6%	88.1%	7.1%	78.3%	7.2%

Southern Australian Beef Industry - Producer Survey

	Total		Beef		Mixed		Small		Medium		Large
	#	%	#	%	#	%	#	%	#	%	#	%
10. Government environmental policy will have a negative impact on my beef business in the future	44.5%	33.8%	45.7%	34.7%	43.5%	32.9%	43.9%	33.3%	44.0%	33.3%	47.8%	36.2%
11. Increasing bio-diversity (flora and fauna) should be an important part of managing my property	71.6%	17.4%	65.3%	22.4%	77.2%	13.0%	70.5%	17.3%	76.2%	15.5%	71.0%	20.3%
12. The beef industry of the future will require QA and certification to maintain market access	86.2%	8.6%	85.8%	10.0%	86.6%	7.3%	85.3%	8.7%	90.5%	7.1%	85.5%	10.1%
13. The beef industry should invest in convincing consumers that beef is a healthy food	96.1%	2.2%	96.8%	0.9%	95.5%	3.3%	95.8%	2.9%	97.6%	1.2%	95.7%	0.0%
14. Using new on-farm technologies will give me a market edge in the future	78.7%	10.5%	79.5%	12.3%	78.0%	8.9%	77.9%	12.2%	78.6%	8.3%	82.6%	5.8%
15. New research is needed to identify new on-farm technologies	80.6%	8.8%	80.8%	10.0%	80.5%	7.7%	80.4%	9.6%	77.4%	8.3%	85.5%	5.8%
16. Users of MLA's research products should pay a commercial price for them	58.5%	25.8%	59.8%	24.7%	57.3%	26.8%	62.5%	22.1%	50.0%	29.8%	50.7%	37.7%
17. The MLA levy should be used for on-farm rather than off-farm research, development and delivery	43.0%	28.4%	45.7%	25.6%	40.7%	30.9%	49.0%	26.0%	31.0%	33.3%	30.4%	33.3%
18. Protecting the environment is more important to me than profit	32.3%	41.7%	31.1%	44.3%	33.3%	39.4%	38.5%	38.1%	16.7%	45.2%	23.2%	53.6%

Southern Australian Beef Industry - Producer Survey

	Total		Beef		Mixed		Small		Medium		Large	
	#	%	#	%	#	%	#	%	#	%	#	%
19. It is worthwhile investing in research to reduce the amount of feed consumed by cattle to turn off a set amount of beef	79.1%	14.2%	81.3%	12.8%	77.2%	15.4%	78.2%	14.7%	78.6%	15.5%	84.1%	10.1%
20. I need to develop a succession or retirement plan	74.6%	20.0%	70.3%	22.8%	78.5%	17.5%	73.4%	20.8%	76.2%	20.2%	78.3%	15.9%

Southern Australian Beef Industry - Producer Survey

	Total		Beef		Mixed		Small		Medium		Large	
	#	%	#	%	#	%	#	%	#	%	#	%
RANKING % OF TOTAL	Average	Top 5	Average	Top 5	Average	Top 5	Average	Top 5	Average	Top 5	Average	Top 5
a. Know how to control and manage diseases and health	6.5%	46.3%	6.5%	46.8%	6.5%	45.9%	6.7%	48.7%	6.7%	51.2%	5.6%	28.8%
b. Understand how to control weeds, insect pests and vertebrate pests (e.g. rabbits, foxes, kangaroos. on your property	4.4%	18.9%	4.7%	21.8%	4.2%	16.4%	4.7%	21.2%	4.1%	19.5%	3.6%	7.6%
c. Have access to new pasture varieties to improve cattle production and the environment on your farm	5.5%	28.9%	5.5%	29.6%	5.4%	28.3%	5.6%	32.7%	5.2%	22.0%	5.1%	19.7%
d. Know how to maximise feed from your pastures without degrading the land	6.5%	41.7%	6.5%	43.5%	6.4%	40.2%	6.5%	43.6%	6.5%	32.9%	6.2%	43.9%
e. Know how to maximise beef production from the feed resources on your property	6.7%	49.6%	6.9%	51.9%	6.6%	47.5%	6.7%	49.4%	6.9%	51.2%	6.8%	48.5%
f. Know how to effectively use fertilisers and avoid adverse effects on the soil and water on your property	5.6%	26.3%	5.7%	26.9%	5.4%	25.8%	5.6%	27.6%	5.7%	25.6%	5.0%	21.2%
g. Have the ability to continuously improve the genetics of your cattle	5.0%	25.0%	4.8%	21.8%	5.3%	27.9%	4.8%	26.0%	5.7%	29.3%	5.2%	15.2%
h. Know how to identify market specifications and trends for the cattle you produce	5.5%	26.3%	5.4%	25.5%	5.5%	27.0%	5.2%	22.4%	5.8%	31.7%	6.0%	37.9%
i. Have the knowledge and skills to adapt your production system to meet market specifications	5.7%	29.1%	5.7%	28.7%	5.7%	29.5%	5.5%	25.0%	6.4%	42.7%	5.8%	31.8%

Southern Australian Beef Industry - Producer Survey

	Total		Beef		Mixed		Small		Medium		Large	
	#	%	#	%	#	%	#	%	#	%	#	%
j. Be confident that industry QA systems will help ensure growth of the markets for your products	4.5%	18.7%	4.5%	18.5%	4.4%	18.9%	4.5%	19.2%	4.3%	18.3%	4.4%	16.7%
k. Have a cost effective approach to all the product and environment QA systems you are required to have	4.2%	14.1%	4.2%	14.8%	4.3%	13.5%	4.4%	15.7%	3.9%	9.8%	3.8%	12.1%
l. Know how to plan your property to balance your production with the environment	5.1%	25.4%	5.2%	26.4%	5.0%	24.6%	5.1%	25.6%	5.3%	24.4%	5.0%	25.8%
m. Have the business planning skills to maximise your return on investment and improve your lifestyle	5.8%	35.7%	5.6%	31.5%	6.0%	39.3%	5.6%	33.0%	6.2%	39.0%	6.2%	43.9%
n. Know how to attract, develop and retain good quality staff	2.5%	8.7%	2.3%	8.8%	2.6%	8.6%	2.2%	8.0%	2.9%	7.3%	3.1%	13.6%
o. Be confident that beef is recognised in the market place for its value for money	5.7%	31.3%	5.8%	33.8%	5.6%	29.1%	5.6%	30.1%	5.4%	28.0%	6.5%	40.9%
p. Be confident the industry supply chain post-farm-gate is improving its efficiency	5.1%	23.3%	4.9%	19.9%	5.2%	26.2%	5.1%	21.2%	4.6%	19.5%	5.8%	37.9%
q. Know how to monitor things like soil, water and bio-diversity so you can manage the impact of your beef operation on the environment	4.2%	12.4%	4.3%	13.9%	4.2%	11.1%	4.3%	13.1%	4.1%	12.2%	3.9%	9.1%

Southern Australian Beef Industry - Producer Survey

	Total			Beef		Mixed		Small		Medium			Large
	#	%	#	%	#	%	#	%	#	%	#	%
r. Understand the likely effects on your beef business of emerging environmental issues such as genetically modified organisms (GMOs., greenhouse gases and salinity	3.7%	10.2%	3.6%	8.8%	3.7%	11.5%	3.8%	11.5%	3.3%	9.8%	3.4%	4.5%
s. Know the wider community has confidence that beef producers responsibly manage environment and animal welfare issues	4.3%	18.5%	4.4%	18.5%	4.2%	18.4%	4.4%	17.9%	3.8%	17.1%	4.7%	22.7%
t. Have research results delivered in a way which suits your business and learning style	3.6%	9.6%	3.5%	8.8%	3.6%	10.2%	3.5%	8.0%	3.3%	8.5%	3.9%	18.2%

Southern Australian Beef Industry - Producer Survey

	Total		Beef		Mixed		Small		Medium		Large
	#	%	#	%	#	%	#	%	#	%	#	%
SATISFACTION	Average	Poor	Average	Poor	Average	Poor	Average	Poor	Average	Poor	Average	Poor
a. Know how to control and manage diseases and health problems with your cattle	3.18	5.8%	3.15	6.7%	3.20	5.0%	3.13	6.6%	3.37	2.4%	3.17	6.1%
b. Understand how to control weeds, insect pests and vertebrate pests (e.g. rabbits, foxes, kangaroos. on your property	3.18	6.0%	3.11	9.6%	3.23	2.9%	3.18	6.0%	3.10	7.3%	3.26	4.5%
c. Have access to new pasture varieties to improve cattle production and the environment on your farm	3.12	6.0%	3.08	7.2%	3.15	5.0%	3.03	7.3%	3.30	2.4%	3.27	4.5%
d. Know how to maximise feed from your pastures without degrading the land	3.03	4.9%	3.00	6.2%	3.06	3.7%	2.96	6.0%	3.12	3.7%	3.21	1.5%
e. Know how to maximise beef production from the feed resources on your property	2.99	5.5%	2.98	7.6%	3.00	3.7%	2.90	5.0%	3.12	7.3%	3.21	6.0%
f. Know how to effectively use fertilisers and avoid adverse effects on the soil and water on your property	2.99	6.5%	2.97	7.3%	3.00	5.9%	2.96	6.7%	3.06	2.4%	3.00	10.9%
g. Have the ability to continuously improve the genetics of your cattle	3.16	6.0%	3.17	9.1%	3.15	3.3%	3.06	7.0%	3.29	4.9%	3.48	3.0%
h. Know how to identify market specifications and trends for the cattle you produce	2.88	7.1%	2.82	9.6%	2.92	5.0%	2.81	8.3%	2.88	6.2%	3.17	3.0%
i. Have the knowledge and skills to adapt your production system to meet market specifications	2.83	5.8%	2.88	7.6%	2.78	4.2%	2.74	5.6%	2.85	8.8%	3.19	3.0%

	Total		Beef		Mixed		Small		Medium		Large	
	#	%	#	%	#	%	#	%	#	%	#	%
j. Be confident that industry QA systems will help ensure growth of the markets for your products	2.55	15.3%	2.55	17.6%	2.56	13.3%	2.52	15.6%	2.62	13.4%	2.60	16.4%
k. Have a cost effective approach to all the product and environment QA systems you are required to have	3.00	13.0%	3.00	14.8%	3.00	11.4%	3.00	12.4%	3.00	12.2%	3.00	16.7%
l. Know how to plan your property to balance your production with the environment	2.86	5.1%	2.84	7.2%	2.88	3.3%	2.83	5.6%	2.91	3.7%	2.94	4.5%
m. Have the business planning skills to maximise your return on investment and improve your lifestyle	2.83	7.1%	2.79	8.7%	2.87	5.8%	2.78	7.7%	2.87	7.3%	3.05	4.5%
n. Know how to attract, develop and retain good quality staff	2.67	11.4%	2.66	14.1%	2.67	9.1%	2.56	12.9%	2.84	11.4%	2.91	4.6%
o. Be confident that beef is recognised in the market place for its value for money	2.64	13.8%	2.52	17.1%	2.75	10.8%	2.74	11.6%	2.41	19.5%	2.46	16.4%
p. Be confident the industry supply chain post-farm-gate is improving its efficiency	2.51	14.5%	2.44	17.7%	2.57	11.7%	2.55	12.7%	2.54	14.6%	2.28	22.4%
q. Know how to monitor things like soil, water and bio-diversity so you can manage the impact of your beef operation on the environment	2.82	8.0%	2.74	10.0%	2.89	6.3%	2.81	8.0%	2.83	8.5%	2.85	7.6%

Southern Australian Beef Industry - Producer Survey

	Total		Beef		Mixed		Small		Medium		Large
	#	%	#	%	#	%	#	%	#	%	#	%
r. Understand the likely effects on your beef business of emerging environmental issues such as genetically modified organisms (GMOs., greenhouse gases and salinity	2.35	19.2%	2.34	19.1%	2.37	19.2%	2.37	17.9%	2.27	26.8%	2.41	15.2%
s. Know the wider community has confidence that beef producers responsibly manage environment and animal welfare issues	2.45	15.8%	2.40	19.0%	2.50	13.0%	2.52	13.4%	2.35	16.9%	2.28	25.4%
t. Have research results delivered in a way which suits your business and learning style	2.66	10.5%	2.62	13.5%	2.69	7.9%	2.65	11.7%	2.72	7.3%	2.64	9.0%

Southern Australian Beef Industry - Producer Survey

	Small Beef		Medium Beef		Large Beef		Small Mixed		Medium Mixed		Large Mixed		
	#	%	#	%	#	%	#	%	#	%	#	%	#
Number	137		36		46		175		48		23		132
80% or more Income from beef													
Yes	137	100.0%	36	100.0%	46	100.0%	0	0.0%	0	0.0%	0	0.0%	67
No	0	0.0%	0	0.0%	0	0.0%	175	100.0%	48	100.0%	23	100.0%	65
Total	137	100.0%	36	100.0%	46	100.0%	175	100.0%	48	100.0%	23	100.0%	132
Gross income from beef													
Less than $100,000	137	100.0%	0	0.0%	0	0.0%	175	100.0%	0	0.0%	0	0.0%	72
Between $100k and $200k	0	0.0%	36	100.0%	0	0.0%	0	0.0%	48	100.0%	0	0.0%	21
Over $200,000	0	0.0%	0	0.0%	46	100.0%	0	0.0%	0	0.0%	23	100.0%	39
Total	137	100.0%	36	100.0%	46	100.0%	175	100.0%	48	100.0%	23	100.0%	132
Category													
Small Beef	137	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	29
Medium Beef	0	0.0%	36	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	11
Large Beef	0	0.0%	0	0.0%	46	100.0%	0	0.0%	0	0.0%	0	0.0%	27
Small Mixed	0	0.0%	0	0.0%	0	0.0%	175	100.0%	0	0.0%	0	0.0%	43
Medium Mixed	0	0.0%	0	0.0%	0	0.0%	0	0.0%	48	100.0%	0	0.0%	10
Large Mixed	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	23	100.0%	12
Total	137	100.0%	36	100.0%	46	100.0%	175	100.0%	48	100.0%	23	100.0%	132
State													
NSW - NORTH	14	10.2%	7	19.4%	19	41.3%	23	13.1%	7	14.6%	7	30.4%	77
NSW - SOUTH	15	10.9%	4	11.1%	8	17.4%	20	11.4%	3	6.3%	5	21.7%	55
SA - SOUTH EAST	7	5.1%	2	5.6%	1	2.2%	23	13.1%	4	8.3%	2	8.7%	0
SA - THE REST	1	0.7%	1	2.8%	1	2.2%	6	3.4%	4	8.3%	3	13.0%	0
TAS	47	34.3%	5	13.9%	2	4.3%	31	17.7%	12	25.0%	0	0.0%	0
VIC	33	24.1%	9	25.0%	9	19.6%	28	16.0%	10	20.8%	3	13.0%	0
WA - NORTH	4	2.9%	4	11.1%	3	6.5%	28	16.0%	4	8.3%	1	4.3%	0
WA - SOUTH	16	11.7%	4	11.1%	3	6.5%	16	9.1%	4	8.3%	2	8.7%	0
Total	137	100.0%	36	100.0%	46	100.0%	175	100.0%	48	100.0%	23	100.0%	132

Southern Australian Beef Industry - Producer Survey

	Small Beef		Medium Beef		Large Beef		Small Mixed		Medium Mixed		Large Mixed		
	#	%	#	%	#	%	#	%	#	%	#	%	#
Principal beef business													
Breeder	101	73.7%	25	69.4%	34	73.9%	139	79.4%	42	87.5%	19	82.6%	110
Finisher	26	19.0%	9	25.0%	11	23.9%	24	13.7%	4	8.3%	2	8.7%	17
Backgrounder	7	5.1%	0	0.0%	0	0.0%	1	0.6%	0	0.0%	1	4.3%	1
Lot Feeder	2	1.5%	1	2.8%	0	0.0%	2	1.1%	2	4.2%	0	0.0%	2
Dairy	1	0.7%	1	2.8%	1	2.2%	9	5.1%	0	0.0%	1	4.3%	2
Total	137	100.0%	36	100.0%	46	100.0%	175	100.0%	48	100.0%	23	100.0%	132
Gender													
Male	98	71.5%	31	86.1%	40	87.0%	131	74.9%	43	89.6%	21	91.3%	102
Female	39	28.5%	5	13.9%	6	13.0%	44	25.1%	5	10.4%	2	8.7%	30
Total	137	100.0%	36	100.0%	46	100.0%	175	100.0%	48	100.0%	23	100.0%	132
Age													
Less than 20	1	0.7%	0	0.0%	0	0.0%	1	0.6%	0	0.0%	0	0.0%	0
20-39	16	11.7%	3	8.3%	8	17.4%	27	15.4%	9	18.8%	6	26.1%	21
40-49	31	22.6%	7	19.4%	14	30.4%	44	25.1%	12	25.0%	10	43.5%	29
50-59	42	30.7%	12	33.3%	22	47.8%	61	34.9%	17	35.4%	5	21.7%	49
60-74	39	28.5%	12	33.3%	2	4.3%	37	21.1%	7	14.6%	2	8.7%	29
75 and over	8	5.8%	2	5.6%	0	0.0%	5	2.9%	3	6.3%	0	0.0%	4
Total	137	100.0%	36	100.0%	46	100.0%	175	100.0%	48	100.0%	23	100.0%	132
Others Involved in Decision Making													
Spouse	79	73.1%	23	62.2%	21	42.0%	103	64.0%	19	43.2%	12	40.0%	67
Parents	4	3.7%	4	10.8%	5	10.0%	10	6.2%	6	13.6%	4	13.3%	11
Siblings	8	7.4%	2	5.4%	7	14.0%	11	6.8%	8	18.2%	4	13.3%	12
Business Partner	1	0.9%	1	2.7%	3	6.0%	2	1.2%	0	0.0%	2	6.7%	5
Other (Children)	16	14.8%	7	18.9%	14	28.0%	35	21.7%	11	25.0%	8	26.7%	37
Total	108	100.0%	37	100.0%	50	100.0%	161	100.0%	44	100.0%	30	100.0%	132

Southern Australian Beef Industry - Producer Survey

	Small Beef		Medium Beef		Large Beef		Small Mixed		Medium Mixed		Large Mixed		
	#	%	#	%	#	%	#	%	#	%	#	%	#
Property size (hectares)													
Average	297		1903		113932		1262		2984		5721		40908
Median	121		567		1538		440		1214		3194		1044
Std Dev	570		7324		736647		4014		5833		5443		435067
Average annual rainfall (mm)													
Average	822		848		821		689		736		634		759
Median	800		838		762		660		755		640		761
Std Dev	246		235		523		292		210		155		258
Total number of cattle													
Average	155		565		2394		169		634		1647		954
Median	100		460		1175		110		500		1200		399
Std Dev	153		531		5183		195		499		1251		3183
Would use EBVs													
Yes	80	58.4%	24	66.7%	35	76.1%	104	59.4%	36	75.0%	17	73.9%	94
No	57	41.6%	12	33.3%	11	23.9%	71	40.6%	12	25.0%	6	26.1%	38
	137	100.0%	36	100.0%	46	100.0%	175	100.0%	48	100.0%	23	100.0%	132
Accurate cost													
Yes	44	32.1%	17	47.2%	30	65.2%	66	37.7%	23	47.9%	13	56.5%	63
No	93	67.9%	19	52.8%	16	34.8%	109	62.3%	25	52.1%	10	43.5%	69
	137	100.0%	36	100.0%	46	100.0%	175	100.0%	48	100.0%	23	100.0%	132
Q4. MLA member													
Yes	50	36.5%	21	58.3%	38	82.6%	77	44.0%	37	77.1%	18	78.3%	96
No	87	63.5%	15	41.7%	8	17.4%	98	56.0%	11	22.9%	5	21.7%	36
	137	100.0%	36	100.0%	46	100.0%	175	100.0%	48	100.0%	23	100.0%	132

Southern Australian Beef Industry - Producer Survey

	Small Beef		Medium Beef		Large Beef		Small Mixed		Medium Mixed		Large Mixed		
	#	%	#	%	#	%	#	%	#	%	#	%	#
ATTITUDES	A&SA%	D&SD%	A&SA%	D&SD%	A&SA%	D&SD%	A&SA%	D&SD%	A&SA%	D&SD%	A&SA%	D&SD%	A&SA%
1. Cloning and gene technologies will be important in the beef industry in the	53.3%	27.0%	41.7%	33.3%	47.8%	32.6%	48.6%	32.6%	62.5%	20.8%	65.2%	21.7%	52.3%
2. The most effective way to achieve market specifications on my property is to use cattle	24.8%	51.8%	33.3%	36.1%	19.6%	52.2%	26.3%	49.7%	22.9%	47.9%	26.1%	52.2%	19.7%
3. Producers that use supplementary feeding make more money	42.3%	39.4%	38.9%	41.7%	37.0%	45.7%	45.7%	37.7%	31.3%	47.9%	47.8%	39.1%	38.6%
4. Investing in plant breeding is more likely to improve my bottom line than an equivalent	33.6%	37.2%	47.2%	33.3%	34.8%	37.0%	41.1%	32.0%	29.2%	37.5%	47.8%	30.4%	34.8%
5. Grazing management is more effective than chemical or insects for weed control	70.1%	24.1%	69.4%	19.4%	54.3%	26.1%	61.1%	23.4%	64.6%	18.8%	65.2%	30.4%	62.9%
6. Pasture productivity is the most important business profit driver	90.5%	2.2%	97.2%	0.0%	93.5%	4.3%	82.9%	7.4%	85.4%	12.5%	73.9%	17.4%	87.1%
7. High stocking rates increase animal health problems	70.1%	22.6%	86.1%	13.9%	67.4%	21.7%	74.3%	18.3%	75.0%	20.8%	56.5%	43.5%	75.8%
8. Planting more trees on my farm would improve my profitability	41.6%	49.6%	47.2%	44.4%	34.8%	45.7%	36.6%	48.6%	56.3%	37.5%	30.4%	56.5%	25.8%
9. I should be financially rewarded for environmentally sustainable beef production	86.1%	10.2%	88.9%	8.3%	76.1%	6.5%	84.6%	9.1%	87.5%	6.3%	82.6%	8.7%	84.1%

Southern Australian Beef Industry - Producer Survey

	Small Beef		Medium Beef		Large Beef		Small Mixed		Medium Mixed		Large Mixed		
	#	%	#	%	#	%	#	%	#	%	#	%	#
10. Government environmental policy will have a negative impact on my beef business in the future	43.8%	32.8%	47.2%	44.4%	50.0%	32.6%	44.0%	33.7%	41.7%	25.0%	43.5%	43.5%	55.3%
11. Increasing bio-diversity (flora and fauna) should be an important part of managing my property	65.7%	20.4%	63.9%	27.8%	65.2%	23.9%	74.3%	14.9%	85.4%	6.3%	82.6%	13.0%	66.7%
12. The beef industry of the future will require QA and certification to maintain market access	87.6%	8.8%	83.3%	13.9%	82.6%	10.9%	83.4%	8.6%	95.8%	2.1%	91.3%	8.7%	87.9%
13. The beef industry should invest in convincing consumers that beef is a healthy food	97.1%	1.5%	97.2%	0.0%	95.7%	0.0%	94.9%	4.0%	97.9%	2.1%	95.7%	0.0%	95.5%
14. Using new on-farm technologies will give me a market edge in the future	79.6%	13.1%	75.0%	16.7%	82.6%	6.5%	76.6%	11.4%	81.3%	2.1%	82.6%	4.3%	82.6%
15. New research is needed to identify new on-farm technologies	81.8%	9.5%	72.2%	13.9%	84.8%	8.7%	79.4%	9.7%	81.3%	4.2%	87.0%	0.0%	86.4%
16. Users of MLA's research products should pay a commercial price for them	62.0%	20.4%	61.1%	25.0%	52.2%	37.0%	62.9%	23.4%	41.7%	33.3%	47.8%	39.1%	56.1%
17. The MLA levy should be used for on-farm rather than off-farm research, development and delivery	54.7%	23.4%	33.3%	30.6%	28.3%	28.3%	44.6%	28.0%	29.2%	35.4%	34.8%	43.5%	39.4%
18. Protecting the environment is more important to me than profit	38.0%	39.4%	13.9%	47.2%	23.9%	56.5%	38.9%	37.1%	18.8%	43.8%	21.7%	47.8%	25.0%

Southern Australian Beef Industry - Producer Survey

	Small Beef		Medium Beef		Large Beef		Small Mixed		Medium Mixed		Large Mixed		
	#	%	#	%	#	%	#	%	#	%	#	%	#
19. It is worthwhile investing in research to reduce the amount of feed consumed by cattle to turn off a set amount of beef	83.9%	10.2%	69.4%	22.2%	82.6%	13.0%	73.7%	18.3%	85.4%	10.4%	87.0%	4.3%	84.1%
20. I need to develop a succession or retirement plan	65.7%	25.5%	75.0%	25.0%	80.4%	13.0%	79.4%	17.1%	77.1%	16.7%	73.9%	21.7%	77.3%

Southern Australian Beef Industry - Producer Survey

	Small Beef		Medium Beef		Large Beef		Small Mixed		Medium Mixed		Large Mixed		
	#	%	#	%	#	%	#	%	#	%	#	%	#
RANKING % OF TOTAL	Average	Top 5	Average	Top 5	Average	Top 5	Average	Top 5	Average	Top 5	Average	Top 5	Average
a. Know how to control and manage diseases and health	6.8%	51.1%	7.0%	58.3%	5.3%	23.3%	6.6%	46.9%	6.4%	45.7%	6.1%	39.1%	6.2%
b. Understand how to control weeds, insect pests and vertebrate pests (e.g. rabbits, foxes, kangaroos. on your property	5.1%	24.8%	4.7%	25.0%	3.3%	9.3%	4.4%	18.3%	3.6%	15.2%	4.0%	4.3%	3.9%
c. Have access to new pasture varieties to improve cattle production and the environment on your farm	5.7%	35.0%	5.4%	16.7%	5.0%	23.3%	5.6%	30.9%	5.1%	26.1%	5.2%	13.0%	5.4%
d. Know how to maximise feed from your pastures without degrading the land	6.6%	46.0%	6.4%	27.8%	6.3%	48.8%	6.4%	41.7%	6.6%	37.0%	6.2%	34.8%	6.2%
e. Know how to maximise beef production from the feed resources on your property	6.8%	51.8%	7.1%	55.6%	6.8%	48.8%	6.6%	47.4%	6.7%	47.8%	6.7%	47.8%	6.5%
f. Know how to effectively use fertilisers and avoid adverse effects on the soil and water on your property	5.9%	27.7%	5.9%	25.0%	5.1%	25.6%	5.5%	27.4%	5.6%	26.1%	4.9%	13.0%	5.3%
g. Have the ability to continuously improve the genetics of your cattle	4.5%	24.1%	5.3%	25.0%	5.3%	11.6%	5.1%	27.4%	6.1%	32.6%	5.0%	21.7%	5.2%
h. Know how to identify market specifications and trends for the cattle you produce	5.2%	19.7%	5.5%	36.1%	6.0%	34.9%	5.3%	24.6%	6.0%	28.3%	6.1%	43.5%	6.1%
i. Have the knowledge and skills to adapt your production system to meet market specifications	5.3%	20.4%	6.6%	50.0%	6.1%	37.2%	5.6%	28.6%	6.2%	37.0%	5.1%	21.7%	6.1%

Southern Australian Beef Industry - Producer Survey

	Small Beef		Medium Beef		Large Beef		Small Mixed		Medium Mixed		Large Mixed		
	#	%	#	%	#	%	#	%	#	%	#	%	#
j. Be confident that industry QA systems will help ensure growth of the markets for your products	4.6%	20.4%	4.4%	22.2%	4.4%	9.3%	4.5%	18.3%	4.1%	15.2%	4.4%	30.4%	4.5%
k. Have a cost effective approach to all the product and environment QA systems you are required to have	4.4%	17.5%	3.7%	8.3%	4.0%	11.6%	4.4%	14.3%	4.1%	10.9%	3.5%	13.0%	4.3%
l. Know how to plan your property to balance your production with the environment	5.2%	25.5%	5.2%	22.2%	5.2%	32.6%	4.9%	25.7%	5.3%	26.1%	4.6%	13.0%	5.1%
m. Have the business planning skills to maximise your return on investment and improve your lifestyle	5.3%	26.3%	5.8%	33.3%	6.3%	46.5%	5.8%	38.3%	6.5%	43.5%	5.9%	39.1%	5.8%
n. Know how to attract, develop and retain good quality staff	2.1%	8.8%	2.2%	0.0%	3.2%	16.3%	2.3%	7.4%	3.5%	13.0%	3.0%	8.7%	2.3%
o. Be confident that beef is recognised in the market place for its value for money	5.6%	32.8%	5.5%	30.6%	6.5%	39.5%	5.6%	28.0%	5.3%	26.1%	6.4%	43.5%	6.0%
p. Be confident the industry supply chain post-farm-gate is improving its efficiency	4.8%	16.8%	4.8%	19.4%	5.4%	30.2%	5.3%	24.6%	4.4%	19.6%	6.6%	52.2%	5.5%
q. Know how to monitor things like soil, water and bio-diversity so you can manage the impact of your beef operation on the environment	4.4%	16.1%	4.2%	11.1%	3.9%	9.3%	4.3%	10.9%	4.1%	13.0%	3.9%	8.7%	4.1%

Southern Australian Beef Industry - Producer Survey

	Small Beef		Medium Beef		Large Beef		Small Mixed		Medium Mixed		Large Mixed		
	#	%	#	%	#	%	#	%	#	%	#	%	#
r. Understand the likely effects on your beef business of emerging environmental issues such as genetically modified organisms (GMOs., greenhouse gases and salinity	3.8%	10.2%	3.1%	5.6%	3.4%	7.0%	3.8%	12.6%	3.6%	13.0%	3.5%	0.0%	3.5%
s. Know the wider community has confidence that beef producers responsibly manage environment and animal welfare issues	4.4%	17.5%	4.2%	19.4%	4.7%	20.9%	4.4%	18.3%	3.5%	15.2%	4.7%	26.1%	4.5%
t. Have research results delivered in a way which suits your business and learning style	3.5%	7.3%	3.2%	8.3%	3.8%	14.0%	3.5%	8.6%	3.5%	8.7%	4.2%	26.1%	3.6%

Southern Australian Beef Industry - Producer Survey

	Small Beef		Medium Beef		Large Beef		Small Mixed		Medium Mixed		Large Mixed		
	#	%	#	%	#	%	#	%	#	%	#	%	#
SATISFACTION	Average	Poor	Average	Poor	Average	Poor	Average	Poor	Average	Poor	Average	Poor	Average
a. Know how to control and manage diseases and health problems with your cattle	3.12	8.5%	3.36	2.8%	3.07	4.7%	3.13	5.3%	3.37	2.2%	3.35	8.7%	3.27
b. Understand how to control weeds, insect pests and vertebrate pests (e.g. rabbits, foxes, kangaroos. on your property	3.14	9.3%	2.92	13.9%	3.19	7.0%	3.21	3.5%	3.24	2.2%	3.39	0.0%	3.16
c. Have access to new pasture varieties to improve cattle production and the environment on your farm	3.02	8.5%	3.14	5.6%	3.21	4.7%	3.04	6.4%	3.43	0.0%	3.39	4.3%	3.11
d. Know how to maximise feed from your pastures without degrading the land	2.92	7.8%	3.03	5.6%	3.18	2.3%	2.99	4.7%	3.20	2.2%	3.26	0.0%	3.07
e. Know how to maximise beef production from the feed resources on your property	2.93	6.2%	3.06	11.1%	3.05	9.1%	2.88	4.1%	3.17	4.3%	3.52	0.0%	2.95
f. Know how to effectively use fertilisers and avoid adverse effects on the soil and water on your property	2.94	7.0%	3.03	2.8%	3.02	11.9%	2.98	6.5%	3.09	2.1%	2.95	9.1%	2.87
g. Have the ability to continuously improve the genetics of your cattle	3.04	11.5%	3.39	5.6%	3.40	4.7%	3.07	3.5%	3.22	4.3%	3.65	0.0%	3.30
h. Know how to identify market specifications and trends for the cattle you produce	2.74	11.5%	2.81	11.1%	3.09	2.3%	2.87	5.8%	2.93	2.2%	3.30	4.3%	2.96
i. Have the knowledge and skills to adapt your production system to meet market specifications	2.81	6.9%	2.78	13.9%	3.18	4.5%	2.69	4.7%	2.91	4.5%	3.22	0.0%	2.86

	Small Beef		Medium Beef		Large Beef		Small Mixed		Medium Mixed		Large Mixed		
	#	%	#	%	#	%	#	%	#	%	#	%	#
j. Be confident that industry QA systems will help ensure growth of the markets for your products	2.60	15.4%	2.36	25.0%	2.55	18.2%	2.47	15.8%	2.83	4.3%	2.70	13.0%	2.58
k. Have a cost effective approach to all the product and environment QA systems you are required to have	3.00	12.3%	3.00	22.2%	3.00	16.3%	2.50	12.5%	3.00	4.3%	3.00	17.4%	3.00
l. Know how to plan your property to balance your production with the environment	2.79	6.9%	2.86	8.3%	2.98	7.0%	2.86	4.7%	2.96	0.0%	2.87	0.0%	2.94
m. Have the business planning skills to maximise your return on investment and improve your lifestyle	2.77	8.5%	2.67	13.9%	2.95	4.7%	2.78	7.0%	3.02	2.2%	3.22	4.3%	2.72
n. Know how to attract, develop and retain good quality staff	2.58	15.6%	2.59	23.5%	2.95	2.4%	2.55	11.0%	3.02	2.2%	2.83	8.7%	2.76
o. Be confident that beef is recognised in the market place for its value for money	2.65	13.1%	2.28	25.0%	2.34	22.7%	2.81	10.5%	2.52	15.2%	2.70	4.3%	2.63
p. Be confident the industry supply chain post-farm-gate is improving its efficiency	2.50	17.8%	2.31	22.2%	2.36	13.6%	2.58	8.8%	2.72	8.7%	2.13	39.1%	2.47
q. Know how to monitor things like soil, water and bio-diversity so you can manage the impact of your beef operation on the environment	2.70	10.0%	2.75	11.1%	2.84	9.3%	2.89	6.4%	2.89	6.5%	2.87	4.3%	2.84

	Small Beef		Medium Beef		Large Beef		Small Mixed		Medium Mixed		Large Mixed		
	#	%	#	%	#	%	#	%	#	%	#	%	#
r. Understand the likely effects on your beef business of emerging environmental issues such as genetically modified organisms (GMOs., greenhouse gases and salinity	2.37	16.2%	2.28	33.3%	2.30	16.3%	2.36	19.3%	2.26	21.7%	2.61	13.0%	2.36
s. Know the wider community has confidence that beef producers responsibly manage environment and animal welfare issues	2.49	16.9%	2.28	19.4%	2.25	25.0%	2.54	10.7%	2.40	14.9%	2.35	26.1%	2.26
t. Have research results delivered in a way which suits your business and learning style	2.64	13.3%	2.61	13.9%	2.57	13.6%	2.65	10.5%	2.80	2.2%	2.78	0.0%	2.72

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	NSW		SA		TAS		VIC		WA
	%	#	%	#	%	#	%	#	%
Number		55		97		92		89	
80% or more Income from beef									
Yes	50.8%	13	23.6%	54	55.7%	51	55.4%	34	38.2%
No	49.2%	42	76.4%	43	44.3%	41	44.6%	55	61.8%
Total	100.0%	55	100.0%	97	100.0%	92	100.0%	89	100.0%
Gross income from beef									
Less than $100,000	54.5%	37	67.3%	78	80.4%	61	66.3%	64	71.9%
Between $100k and $200k	15.9%	11	20.0%	17	17.5%	19	20.7%	16	18.0%
Over $200,000	29.5%	7	12.7%	2	2.1%	12	13.0%	9	10.1%
Total	100.0%	55	100.0%	97	100.0%	92	100.0%	89	100.0%
Category									
Small Beef	22.0%	8	14.5%	47	48.5%	33	35.9%	20	22.5%
Medium Beef	8.3%	3	5.5%	5	5.2%	9	9.8%	8	9.0%
Large Beef	20.5%	2	3.6%	2	2.1%	9	9.8%	6	6.7%
Small Mixed	32.6%	29	52.7%	31	32.0%	28	30.4%	44	49.4%
Medium Mixed	7.6%	8	14.5%	12	12.4%	10	10.9%	8	9.0%
Large Mixed	9.1%	5	9.1%	0	0.0%	3	3.3%	3	3.4%
Total	100.0%	55	100.0%	97	100.0%	92	100.0%	89	100.0%
State									
NSW - NORTH	58.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
NSW - SOUTH	41.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
SA - SOUTH EAST	0.0%	39	70.9%	0	0.0%	0	0.0%	0	0.0%
SA - THE REST	0.0%	16	29.1%						
TAS	0.0%	0	0.0%	97	100.0%	0	0.0%	0	0.0%
VIC	0.0%	0	0.0%	0	0.0%	92	100.0%	0	0.0%
WA - NORTH	0.0%	0	0.0%	0	0.0%	0	0.0%	44	49.4%
WA - SOUTH	0.0%	0	0.0%	0	0.0%	0	0.0%	45	50.6%
Total	100.0%	55	100.0%	97	100.0%	92	100.0%	89	100.0%

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	NSW		SA		TAS		VIC		WA
	%	#	%	#	%	#	%	#	%
Principal beef business									
Breeder	83.3%	43	78.2%	67	69.1%	71	77.2%	69	77.5%
Finisher	12.9%	7	12.7%	27	27.8%	14	15.2%	11	12.4%
Backgrounder	0.8%	1	1.8%	1	1.0%	4	4.3%	2	2.2%
Lot Feeder	1.5%	0	0.0%	1	1.0%	1	1.1%	3	3.4%
Dairy	1.5%	4	7.3%	1	1.0%	2	2.2%	4	4.5%
Total	100.0%	55	100.0%	97	100.0%	92	100.0%	89	100.0%
Gender									
Male	77.3%	40	72.7%	80	82.5%	70	76.1%	72	80.9%
Female	22.7%	15	27.3%	17	17.5%	22	23.9%	17	19.1%
Total	100.0%	55	100.0%	97	100.0%	92	100.0%	89	100.0%
Age									
Less than 20	0.0%	1	1.8%	1	1.0%	0	0.0%	0	0.0%
20-39	15.9%	14	25.5%	15	15.5%	8	8.7%	11	12.4%
40-49	22.0%	12	21.8%	31	32.0%	17	18.5%	29	32.6%
50-59	37.1%	19	34.5%	29	29.9%	35	38.0%	27	30.3%
60-74	22.0%	9	16.4%	16	16.5%	26	28.3%	19	21.3%
75 and over	3.0%	0	0.0%	5	5.2%	6	6.5%	3	3.4%
Total	100.0%	55	100.0%	97	100.0%	92	100.0%	89	100.0%
Others Involved in Decision Making									
Spouse	50.8%	31	51.7%	56	70.0%	52	65.8%	51	64.6%
Parents	8.3%	9	15.0%	7	8.8%	3	3.8%	3	3.8%
Siblings	9.1%	7	11.7%	7	8.8%	5	6.3%	9	11.4%
Business Partner	3.8%	1	1.7%	1	1.3%	0	0.0%	2	2.5%
Other (Children)	28.0%	12	20.0%	9	11.3%	19	24.1%	14	17.7%
Total	100.0%	60	100.0%	80	100.0%	79	100.0%	79	100.0%

Southern Australian Beef Industry - Producer Survey

	NSW		SA		TAS		VIC		WA
	%	#	%	#	%	#	%	#	%
Property size (hectares)									
Average		2776		654		1356		1147	
Median		574		202		202		486	
Std Dev		8079		1390		5890		1526	
Average annual rainfall (mm)									
Average		614		848		786		706	
Median		559		863		711		700	
Std Dev		241		271		417		262	
Total number of cattle									
Average		371		317		497		321	
Median		200		130		120		153	
Std Dev		594		575		1047		404	
Would use EBVs									
Yes	71.2%	29	52.7%	67	69.1%	55	59.8%	51	57.3%
No	28.8%	26	47.3%	30	30.9%	37	40.2%	38	42.7%
	100.0%	55	100.0%	97	100.0%	92	100.0%	89	100.0%
Accurate cost									
Yes	47.7%	28	50.9%	28	28.9%	37	40.2%	37	41.6%
No	52.3%	27	49.1%	69	71.1%	55	59.8%	52	58.4%
	100.0%	55	100.0%	97	100.0%	92	100.0%	89	100.0%
Q4. MLA member									
Yes	72.7%	26	47.3%	44	45.4%	46	50.0%	29	32.6%
No	27.3%	29	52.7%	53	54.6%	46	50.0%	60	67.4%
	100.0%	55	100.0%	97	100.0%	92	100.0%	89	100.0%

Southern Australian Beef Industry - Producer Survey

	NSW		SA		TAS		VIC		WA
	%	#	%	#	%	#	%	#	%
ATTITUDES	D&SD%	A&SA%	D&SD%	A&SA%	D&SD%	A&SA%	D&SD%	A&SA%	D&SD%
1. Cloning and gene technologies will be important in the beef industry in the	27.3%	60.0%	29.1%	55.7%	21.6%	48.9%	32.6%	43.8%	37.1%
2. The most effective way to achieve market specifications on my property is to use cattle	53.0%	25.5%	47.3%	26.8%	49.5%	31.5%	47.8%	25.8%	47.2%
3. Producers that use supplementary feeding make more money	41.7%	41.8%	36.4%	32.0%	56.7%	41.3%	37.0%	58.4%	27.0%
4. Investing in plant breeding is more likely to improve my bottom line than an equivalent	38.6%	30.9%	41.8%	39.2%	34.0%	38.0%	31.5%	44.9%	28.1%
5. Grazing management is more effective than chemical or insects for weed control	24.2%	52.7%	30.9%	68.0%	19.6%	63.0%	27.2%	70.8%	18.0%
6. Pasture productivity is the most important business profit driver	7.6%	76.4%	10.9%	91.8%	3.1%	90.2%	1.1%	85.4%	9.0%
7. High stocking rates increase animal health problems	13.6%	81.8%	18.2%	64.9%	26.8%	65.2%	29.3%	77.5%	19.1%
8. Planting more trees on my farm would improve my profitability	58.3%	41.8%	41.8%	42.3%	51.5%	52.2%	34.8%	47.2%	43.8%
9. I should be financially rewarded for environmentally sustainable beef production	6.8%	83.6%	10.9%	85.6%	9.3%	84.8%	8.7%	85.4%	10.1%

	NSW		SA		TAS		VIC		WA
	%	#	%	#	%	#	%	#	%
10. Government environmental policy will have a negative impact on my beef business in the future	27.3%	36.4%	40.0%	41.2%	33.0%	33.7%	41.3%	48.3%	32.6%
11. Increasing bio-diversity (flora and fauna) should be an important part of managing my property	20.5%	81.8%	10.9%	77.3%	14.4%	71.7%	17.4%	66.3%	20.2%
12. The beef industry of the future will require QA and certification to maintain market access	7.6%	87.3%	10.9%	83.5%	11.3%	90.2%	2.2%	82.0%	12.4%
13. The beef industry should invest in convincing consumers that beef is a healthy food	3.0%	92.7%	1.8%	96.9%	3.1%	96.7%	0.0%	97.8%	2.2%
14. Using new on-farm technologies will give me a market edge in the future	6.1%	74.5%	20.0%	75.3%	10.3%	80.4%	6.5%	77.5%	15.7%
15. New research is needed to identify new on-farm technologies	6.1%	80.0%	3.6%	72.2%	17.5%	79.3%	6.5%	83.1%	9.0%
16. Users of MLA's research products should pay a commercial price for them	23.5%	43.6%	36.4%	57.7%	34.0%	66.3%	17.4%	64.0%	22.5%
17. The MLA levy should be used for on-farm rather than off-farm research, development and delivery	24.2%	36.4%	40.0%	49.5%	29.9%	46.7%	27.2%	41.6%	27.0%
18. Protecting the environment is more important to me than profit	41.7%	18.2%	40.0%	36.1%	45.4%	34.8%	45.7%	44.9%	34.8%

Southern Australian Beef Industry - Producer Survey

	NSW		SA		TAS		VIC		WA
	%	#	%	#	%	#	%	#	%
19. It is worthwhile investing in research to reduce the amount of feed consumed by cattle to turn off a set amount of beef	11.4%	61.8%	21.8%	81.4%	11.3%	83.7%	13.0%	75.3%	18.0%
20. I need to develop a succession or retirement plan	19.7%	76.4%	18.2%	74.2%	20.6%	71.7%	18.5%	73.0%	22.5%

	NSW		SA		TAS		VIC		WA
	%	#	%	#	%	#	%	#	%
RANKING % OF TOTAL	Top 5	Average	Top 5	Average	Top 5	Average	Top 5	Average	Top 5
a. Know how to control and manage diseases and health	38.3%	7.2%	56.4%	6.4%	45.4%	6.9%	53.8%	6.4%	44.9%
b. Understand how to control weeds, insect pests and vertebrate pests (e.g. rabbits, foxes, kangaroos. on your property	13.3%	3.9%	20.0%	4.8%	21.6%	4.8%	23.1%	4.7%	19.1%
c. Have access to new pasture varieties to improve cattle production and the environment on your farm	28.9%	4.8%	21.8%	5.2%	25.8%	5.6%	26.4%	6.0%	39.3%
d. Know how to maximise feed from your pastures without degrading the land	39.8%	5.9%	34.5%	6.8%	42.3%	6.6%	42.9%	6.7%	47.2%
e. Know how to maximise beef production from the feed resources on your property	43.0%	6.6%	47.3%	6.7%	51.5%	7.1%	53.8%	6.8%	53.9%
f. Know how to effectively use fertilisers and avoid adverse effects on the soil and water on your property	19.5%	5.0%	23.6%	5.8%	30.9%	6.1%	31.9%	5.6%	27.0%
g. Have the ability to continuously improve the genetics of your cattle	22.7%	5.8%	29.1%	4.6%	25.8%	4.7%	22.0%	5.2%	28.1%
h. Know how to identify market specifications and trends for the cattle you produce	36.7%	5.5%	25.5%	4.9%	18.6%	5.4%	27.5%	5.3%	19.1%
i. Have the knowledge and skills to adapt your production system to meet market specifications	33.6%	5.8%	36.4%	5.3%	23.7%	5.6%	27.5%	5.5%	25.8%

Southern Australian Beef Industry - Producer Survey

	NSW		SA		TAS		VIC		WA
	%	#	%	#	%	#	%	#	%
j. Be confident that industry QA systems will help ensure growth of the markets for your products	18.0%	4.5%	14.5%	4.2%	17.5%	4.4%	19.8%	4.6%	22.5%
k. Have a cost effective approach to all the product and environment QA systems you are required to have	16.4%	4.2%	14.5%	4.1%	12.4%	4.0%	14.3%	4.5%	12.4%
l. Know how to plan your property to balance your production with the environment	26.6%	5.2%	25.5%	5.4%	29.9%	5.0%	23.1%	4.8%	21.3%
m. Have the business planning skills to maximise your return on investment and improve your lifestyle	38.3%	6.0%	36.4%	5.9%	34.0%	5.8%	36.3%	5.5%	32.6%
n. Know how to attract, develop and retain good quality staff	4.7%	2.5%	12.7%	2.5%	11.3%	2.3%	5.5%	2.7%	12.4%
o. Be confident that beef is recognised in the market place for its value for money	35.2%	5.8%	32.7%	5.5%	30.9%	5.5%	27.5%	5.7%	29.2%
p. Be confident the industry supply chain post-farm-gate is improving its efficiency	28.1%	5.5%	29.1%	4.7%	18.6%	4.8%	20.9%	5.0%	20.2%
q. Know how to monitor things like soil, water and bio-diversity so you can manage the impact of your beef operation on the environment	12.5%	4.0%	7.3%	4.7%	14.4%	4.1%	12.1%	4.2%	13.5%

Southern Australian Beef Industry - Producer Survey

	NSW		SA		TAS		VIC		WA
	%	#	%	#	%	#	%	#	%
r. Understand the likely effects on your beef business of emerging environmental issues such as genetically modified organisms (GMOs., greenhouse gases and salinity	10.9%	3.6%	5.5%	4.2%	17.5%	3.6%	5.5%	3.4%	9.0%
s. Know the wider community has confidence that beef producers responsibly manage environment and animal welfare issues	20.3%	4.2%	16.4%	4.6%	20.6%	4.3%	17.6%	3.9%	15.7%
t. Have research results delivered in a way which suits your business and learning style	13.3%	3.8%	10.9%	3.6%	7.2%	3.5%	8.8%	3.4%	6.7%

Southern Australian Beef Industry - Producer Survey

	NSW		SA		TAS		VIC		WA
	%	#	%	#	%	#	%	#	%
SATISFACTION	Poor	Average	Poor	Average	Poor	Average	Poor	Average	Poor
a. Know how to control and manage diseases and health problems with your cattle	3.3%	3.08	7.5%	3.16	9.6%	3.11	5.5%	3.20	4.5%
b. Understand how to control weeds, insect pests and vertebrate pests (e.g. rabbits, foxes, kangaroos. on your property	2.4%	3.43	3.8%	2.98	9.6%	3.16	7.8%	3.27	6.7%
c. Have access to new pasture varieties to improve cattle production and the environment on your farm	4.1%	3.13	5.6%	3.11	8.5%	3.10	6.6%	3.14	5.7%
d. Know how to maximise feed from your pastures without degrading the land	3.2%	3.08	1.9%	3.02	6.4%	2.98	6.6%	3.00	5.6%
e. Know how to maximise beef production from the feed resources on your property	6.5%	2.98	3.8%	2.98	6.4%	3.04	7.7%	2.99	2.2%
f. Know how to effectively use fertilisers and avoid adverse effects on the soil and water on your property	8.1%	3.00	3.8%	2.90	7.5%	3.02	6.7%	3.19	4.5%
g. Have the ability to continuously improve the genetics of your cattle	4.1%	3.08	3.8%	3.02	10.6%	3.14	8.9%	3.19	2.3%
h. Know how to identify market specifications and trends for the cattle you produce	4.9%	3.02	3.8%	2.93	10.6%	2.79	9.9%	2.72	5.7%
i. Have the knowledge and skills to adapt your production system to meet market specifications	5.7%	2.90	1.9%	2.91	7.5%	2.79	5.5%	2.69	6.7%

Southern Australian Beef Industry - Producer Survey

	NSW		SA		TAS		VIC		WA
	%	#	%	#	%	#	%	#	%
j. Be confident that industry QA systems will help ensure growth of the markets for your products	18.7%	2.52	14.8%	2.66	13.8%	2.43	14.3%	2.56	13.6%
k. Have a cost effective approach to all the product and environment QA systems you are required to have	15.6%	3.00	13.0%	3.00	15.1%	2.00	9.9%	2.50	10.5%
l. Know how to plan your property to balance your production with the environment	2.5%	2.96	1.9%	2.78	7.4%	2.80	6.6%	2.84	6.8%
m. Have the business planning skills to maximise your return on investment and improve your lifestyle	8.2%	3.04	3.7%	2.80	9.6%	2.84	5.6%	2.89	6.8%
n. Know how to attract, develop and retain good quality staff	9.5%	2.66	16.0%	2.65	13.5%	2.67	6.7%	2.55	14.1%
o. Be confident that beef is recognised in the market place for its value for money	13.8%	2.59	14.8%	2.66	16.0%	2.52	11.0%	2.80	13.6%
p. Be confident the industry supply chain post-farm-gate is improving its efficiency	17.1%	2.56	11.1%	2.46	19.4%	2.52	12.1%	2.57	10.2%
q. Know how to monitor things like soil, water and bio-diversity so you can manage the impact of your beef operation on the environment	8.1%	2.92	1.9%	2.77	12.8%	2.79	6.6%	2.81	8.0%

Southern Australian Beef Industry - Producer Survey

	NSW		SA		TAS		VIC		WA
	%	#	%	#	%	#	%	#	%
r. Understand the likely effects on your beef business of emerging environmental issues such as genetically modified organisms (GMOs., greenhouse gases and salinity	19.5%	2.38	20.8%	2.22	26.6%	2.33	14.3%	2.50	14.8%
s. Know the wider community has confidence that beef producers responsibly manage environment and animal welfare issues	24.2%	2.52	14.8%	2.50	16.0%	2.54	13.2%	2.56	7.0%
t. Have research results delivered in a way which suits your business and learning style	9.8%	2.57	9.4%	2.71	12.8%	2.61	10.0%	2.61	10.2%

Southern Australian Beef Industry - Producer Survey

	Breeder		Finisher		Backgrounder		Lot Feeder		Dairy	
	#	%	#	%	#	%	#	%	#	%
Number	360		76		9		7		13	
80% or more Income from beef										
Yes	160	44.4%	46	60.5%	7	77.8%	3	42.9%	3	23.1%
No	200	55.6%	30	39.5%	2	22.2%	4	57.1%	10	76.9%
Total	360	100.0%	76	100.0%	9	100.0%	7	100.0%	13	100.0%
Gross income from beef										
Less than $100,000	240	66.7%	50	65.8%	8	88.9%	4	57.1%	10	76.9%
Between $100k and $200k	67	18.6%	13	17.1%	0	0.0%	3	42.9%	1	7.7%
Over $200,000	53	14.7%	13	17.1%	1	11.1%	0	0.0%	2	15.4%
Total	360	100.0%	76	100.0%	9	100.0%	7	100.0%	13	100.0%
Category										
Small Beef	101	28.1%	26	34.2%	7	77.8%	2	28.6%	1	7.7%
Medium Beef	25	6.9%	9	11.8%	0	0.0%	1	14.3%	1	7.7%
Large Beef	34	9.4%	11	14.5%	0	0.0%	0	0.0%	1	7.7%
Small Mixed	139	38.6%	24	31.6%	1	11.1%	2	28.6%	9	69.2%
Medium Mixed	42	11.7%	4	5.3%	0	0.0%	2	28.6%	0	0.0%
Large Mixed	19	5.3%	2	2.6%	1	11.1%	0	0.0%	1	7.7%
Total	360	100.0%	76	100.0%	9	100.0%	7	100.0%	13	100.0%
State										
NSW - NORTH	66	18.3%	8	10.5%	0	0.0%	2	28.6%	1	7.7%
NSW - SOUTH	44	12.2%	9	11.8%	1	11.1%	0	0.0%	1	7.7%
SA - SOUTH EAST	31	8.6%	5	6.6%	1	11.1%	0	0.0%	2	15.4%
SA - THE REST	12	3.3%	2	2.6%	0	0.0%	0	0.0%	2	15.4%
TAS	67	18.6%	27	35.5%	1	11.1%	1	14.3%	1	7.7%
VIC	71	19.7%	14	18.4%	4	44.4%	1	14.3%	2	15.4%
WA - NORTH	38	10.6%	4	5.3%	0	0.0%	2	28.6%	0	0.0%
WA - SOUTH	31	8.6%	7	9.2%	2	22.2%	1	14.3%	4	30.8%
Total	360	100.0%	76	100.0%	9	100.0%	7	100.0%	13	100.0%

Southern Australian Beef Industry - Producer Survey

| | Breeder | | Finisher | | Backgrounder | | Lot Feeder | | Dairy |
	#	%	#	%	#	%	#	%	#	%
Principal beef business										
Breeder	360	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Finisher	0	0.0%	76	100.0%	0	0.0%	0	0.0%	0	0.0%
Backgrounder	0	0.0%	0	0.0%	9	100.0%	0	0.0%	0	0.0%
Lot Feeder	0	0.0%	0	0.0%	0	0.0%	7	100.0%	0	0.0%
Dairy	0	0.0%	0	0.0%	0	0.0%	0	0.0%	13	100.0%
Total	360	100.0%	76	100.0%	9	100.0%	7	100.0%	13	100.0%
Gender										
Male	288	80.0%	57	75.0%	6	66.7%	4	57.1%	9	69.2%
Female	72	20.0%	19	25.0%	3	33.3%	3	42.9%	4	30.8%
Total	360	100.0%	76	100.0%	9	100.0%	7	100.0%	13	100.0%
Age										
Less than 20	2	0.6%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
20-39	53	14.7%	13	17.1%	0	0.0%	0	0.0%	3	23.1%
40-49	89	24.7%	20	26.3%	1	11.1%	5	71.4%	3	23.1%
50-59	125	34.7%	26	34.2%	4	44.4%	1	14.3%	3	23.1%
60-74	76	21.1%	14	18.4%	4	44.4%	1	14.3%	4	30.8%
75 and over	15	4.2%	3	3.9%	0	0.0%	0	0.0%	0	0.0%
Total	360	100.0%	76	100.0%	9	100.0%	7	100.0%	13	100.0%
Others Involved in Decision Making										
Spouse	190	57.2%	45	65.2%	6	75.0%	4	80.0%	12	75.0%
Parents	30	9.0%	3	4.3%	0	0.0%	0	0.0%	0	0.0%
Siblings	32	9.6%	7	10.1%	1	12.5%	0	0.0%	0	0.0%
Business Partner	5	1.5%	3	4.3%	0	0.0%	0	0.0%	1	6.3%
Other (Children)	75	22.6%	11	15.9%	1	12.5%	1	20.0%	3	18.8%
Total	332	100.0%	69	100.0%	8	100.0%	5	100.0%	16	100.0%

Southern Australian Beef Industry - Producer Survey

	Breeder			Finisher		Backgrounder			Lot Feeder			Dairy
	#	%	#	%	#	%	#	%	#	%
Property size (hectares)										
Average	15573		2810		309		2222		362	
Median	560		220		44		1214		259	
Std Dev	263470		14833		543		2263		266	
Average annual rainfall (mm)										
Average	737		826		734		693		851	
Median	711		762		762		838		900	
Std Dev	251		483		208		277		344	
Total number of cattle										
Average	544		540		120		923		493	
Median	190		150		70		590		320	
Std Dev	1967		1211		115		1075		453	
Would use EBVs										
Yes	241	66.9%	37	48.7%	4	44.4%	5	71.4%	9	69.2%
No	119	33.1%	39	51.3%	5	55.6%	2	28.6%	4	30.8%
	360	100.0%	76	100.0%	9	100.0%	7	100.0%	13	100.0%
Accurate cost										
Yes	153	42.5%	27	35.5%	5	55.6%	3	42.9%	5	38.5%
No	207	57.5%	49	64.5%	4	44.4%	4	57.1%	8	61.5%
	360	100.0%	76	100.0%	9	100.0%	7	100.0%	13	100.0%
Q4. MLA member										
Yes	198	55.0%	33	43.4%	1	11.1%	5	71.4%	4	30.8%
No	162	45.0%	43	56.6%	8	88.9%	2	28.6%	9	69.2%
	360	100.0%	76	100.0%	9	100.0%	7	100.0%	13	100.0%

Southern Australian Beef Industry - Producer Survey

		Breeder		Finisher		Backgrounder		Lot Feeder			Dairy
	#	%	#	%	#	%	#	%	#	%
ATTITUDES	**A&SA%**	**D&SD%**	**A&SA%**	**D&SD%**	**A&SA%**	**D&SD%**	**A&SA%**	**D&SD%**	**A&SA%**	**D&SD%**
1. Cloning and gene technologies will be important in the beef industry in the	53.6%	28.6%	44.7%	28.9%	44.4%	44.4%	28.6%	42.9%	53.8%	30.8%
2. The most effective way to achieve market specifications on my property is to use cattle	26.1%	48.1%	19.7%	56.6%	44.4%	44.4%	0.0%	71.4%	38.5%	38.5%
3. Producers that use supplementary feeding make more money	41.1%	41.7%	39.5%	42.1%	33.3%	33.3%	57.1%	14.3%	76.9%	15.4%
4. Investing in plant breeding is more likely to improve my bottom line than an equivalent	36.7%	35.3%	40.8%	28.9%	33.3%	55.6%	28.6%	42.9%	61.5%	30.8%
5. Grazing management is more effective than chemical or insects for weed control	65.3%	21.1%	59.2%	32.9%	77.8%	22.2%	42.9%	42.9%	69.2%	23.1%
6. Pasture productivity is the most important business profit driver	85.8%	6.9%	93.4%	1.3%	77.8%	11.1%	71.4%	14.3%	100.0%	0.0%
7. High stocking rates increase animal health problems	73.3%	19.4%	71.1%	23.7%	66.7%	33.3%	71.4%	28.6%	61.5%	38.5%
8. Planting more trees on my farm would improve my profitability	40.0%	47.2%	39.5%	52.6%	66.7%	33.3%	42.9%	57.1%	38.5%	30.8%
9. I should be financially rewarded for environmentally sustainable beef production	84.7%	8.9%	82.9%	10.5%	100.0%	0.0%	100.0%	0.0%	76.9%	7.7%

	Breeder			Finisher	Backgrounder		Lot Feeder			Dairy
	#	%	#	%	#	%	#	%	#	%
10. Government environmental policy will have a negative impact on my beef business in the future	45.8%	31.7%	40.8%	39.5%	33.3%	44.4%	42.9%	57.1%	38.5%	38.5%
11. Increasing bio-diversity (flora and fauna) should be an important part of managing my property	72.5%	17.2%	65.8%	19.7%	77.8%	22.2%	85.7%	0.0%	69.2%	15.4%
12. The beef industry of the future will require QA and certification to maintain market access	86.9%	8.1%	78.9%	14.5%	88.9%	0.0%	100.0%	0.0%	100.0%	0.0%
13. The beef industry should invest in convincing consumers that beef is a healthy food	95.6%	2.2%	97.4%	2.6%	100.0%	0.0%	100.0%	0.0%	100.0%	0.0%
14. Using new on-farm technologies will give me a market edge in the future	78.1%	10.3%	81.6%	10.5%	88.9%	11.1%	57.1%	28.6%	84.6%	7.7%
15. New research is needed to identify new on-farm technologies	79.4%	9.2%	84.2%	7.9%	66.7%	22.2%	100.0%	0.0%	92.3%	0.0%
16. Users of MLA's research products should pay a commercial price for them	58.3%	25.8%	59.2%	26.3%	55.6%	11.1%	28.6%	57.1%	76.9%	15.4%
17. The MLA levy should be used for on-farm rather than off-farm research, development and delivery	41.7%	28.1%	50.0%	27.6%	55.6%	22.2%	14.3%	57.1%	46.2%	30.8%
18. Protecting the environment is more important to me than profit	33.9%	39.7%	27.6%	44.7%	44.4%	55.6%	14.3%	71.4%	15.4%	53.8%

Southern Australian Beef Industry - Producer Survey

		Breeder		Finisher	Backgrounder		Lot Feeder			Dairy
	#	%	#	%	#	%	#	%	#	%
19. It is worthwhile investing in research to reduce the amount of feed consumed by cattle to turn off a set amount of beef	80.6%	13.1%	76.3%	17.1%	66.7%	33.3%	57.1%	14.3%	76.9%	15.4%
20. I need to develop a succession or retirement plan	73.6%	20.3%	78.9%	17.1%	44.4%	55.6%	100.0%	0.0%	84.6%	15.4%

	Breeder		Finisher		Backgrounder		Lot Feeder			Dairy
	#	%	#	%	#	%	#	%	#	%
RANKING % OF TOTAL	Average	Top 5	Average	Top 5	Average	Top 5	Average	Top 5	Average	Top 5
a. Know how to control and manage diseases and health	6.6%	48.6%	6.5%	40.0%	6.9%	44.4%	5.0%	28.6%	5.2%	30.8%
b. Understand how to control weeds, insect pests and vertebrate pests (e.g. rabbits, foxes, kangaroos. on your property	4.4%	18.3%	4.7%	22.7%	4.0%	11.1%	3.3%	14.3%	4.1%	23.1%
c. Have access to new pasture varieties to improve cattle production and the environment on your farm	5.5%	28.9%	5.6%	30.7%	5.0%	22.2%	5.7%	42.9%	4.3%	15.4%
d. Know how to maximise feed from your pastures without degrading the land	6.4%	41.3%	6.5%	40.0%	7.0%	77.8%	7.7%	57.1%	6.0%	30.8%
e. Know how to maximise beef production from the feed resources on your property	6.8%	51.7%	6.6%	44.0%	5.8%	22.2%	7.0%	71.4%	5.4%	30.8%
f. Know how to effectively use fertilisers and avoid adverse effects on the soil and water on your property	5.6%	28.1%	5.4%	17.3%	4.8%	0.0%	4.9%	28.6%	6.6%	46.2%
g. Have the ability to continuously improve the genetics of your cattle	5.3%	27.5%	3.9%	12.0%	3.3%	11.1%	6.7%	42.9%	5.3%	30.8%
h. Know how to identify market specifications and trends for the cattle you produce	5.5%	26.4%	5.4%	28.0%	4.9%	22.2%	5.2%	14.3%	4.5%	23.1%
i. Have the knowledge and skills to adapt your production system to meet market specifications	5.8%	30.1%	5.2%	22.7%	4.8%	33.3%	5.9%	28.6%	5.5%	38.5%

	Breeder		Finisher		Backgrounder		Lot Feeder		Dairy	
	#	%	#	%	#	%	#	%	#	%
j. Be confident that industry QA systems will help ensure growth of the markets for your products	4.4%	18.5%	4.2%	14.7%	5.9%	44.4%	7.3%	28.6%	5.1%	23.1%
k. Have a cost effective approach to all the product and environment QA systems you are required to have	4.2%	13.2%	4.2%	17.3%	5.4%	22.2%	5.4%	28.6%	5.4%	7.7%
l. Know how to plan your property to balance your production with the environment	5.1%	25.3%	5.4%	32.0%	4.6%	11.1%	4.6%	14.3%	4.2%	7.7%
m. Have the business planning skills to maximise your return on investment and improve your lifestyle	5.8%	34.8%	5.8%	38.7%	5.7%	33.3%	5.4%	28.6%	6.0%	46.2%
n. Know how to attract, develop and retain good quality staff	2.3%	6.5%	2.2%	10.7%	5.6%	33.3%	1.9%	0.0%	5.6%	46.2%
o. Be confident that beef is recognised in the market place for its value for money	5.7%	30.1%	6.1%	40.0%	4.6%	22.2%	5.4%	28.6%	4.9%	23.1%
p. Be confident the industry supply chain post-farm-gate is improving its efficiency	5.0%	22.8%	5.4%	28.0%	5.0%	11.1%	4.4%	14.3%	5.2%	23.1%
q. Know how to monitor things like soil, water and bio-diversity so you can manage the impact of your beef operation on the environment	4.2%	12.1%	4.5%	17.3%	3.6%	11.1%	3.7%	0.0%	3.6%	0.0%

Southern Australian Beef Industry - Producer Survey

		Breeder		Finisher		Backgrounder		Lot Feeder		Dairy
	#	%	#	%	#	%	#	%	#	%
r. Understand the likely effects on your beef business of emerging environmental issues such as genetically modified organisms (GMOs., greenhouse gases and salinity	3.6%	9.6%	3.9%	13.3%	3.1%	0.0%	4.2%	0.0%	4.9%	23.1%
s. Know the wider community has confidence that beef producers responsibly manage environment and animal welfare issues	4.2%	17.4%	4.6%	17.3%	5.8%	55.6%	3.5%	14.3%	5.0%	30.8%
t. Have research results delivered in a way which suits your business and learning style	3.5%	9.0%	3.6%	13.3%	4.4%	11.1%	2.9%	14.3%	3.1%	0.0%

	Breeder			Finisher	Backgrounder		Lot Feeder			Dairy
	#	%	#	%	#	%	#	%	#	%
SATISFACTION	Average	Poor	Average	Poor	Average	Poor	Average	Poor	Average	Poor
a. Know how to control and manage diseases and health problems with your cattle	3.20	5.2%	3.15	4.1%	2.13	37.5%	3.00	14.3%	3.46	7.7%
b. Understand how to control weeds, insect pests and vertebrate pests (e.g. rabbits, foxes, kangaroos. on your property	3.17	5.2%	3.14	9.5%	3.00	14.3%	3.57	0.0%	3.38	7.7%
c. Have access to new pasture varieties to improve cattle production and the environment on your farm	3.11	5.7%	3.08	6.8%	2.63	25.0%	3.57	0.0%	3.62	0.0%
d. Know how to maximise feed from your pastures without degrading the land	3.01	4.0%	3.11	6.8%	2.38	37.5%	2.86	0.0%	3.54	0.0%
e. Know how to maximise beef production from the feed resources on your property	2.99	5.7%	3.09	2.7%	2.00	37.5%	2.71	0.0%	3.15	0.0%
f. Know how to effectively use fertilisers and avoid adverse effects on the soil and water on your property	2.96	7.6%	3.11	1.4%	2.75	12.5%	3.14	0.0%	3.08	7.7%
g. Have the ability to continuously improve the genetics of your cattle	3.18	6.1%	2.99	8.1%	2.88	0.0%	3.43	0.0%	3.77	0.0%
h. Know how to identify market specifications and trends for the cattle you produce	2.88	5.8%	2.99	11.0%	2.50	25.0%	2.86	0.0%	2.46	15.4%
i. Have the knowledge and skills to adapt your production system to meet market specifications	2.82	5.2%	2.90	6.8%	2.75	25.0%	3.14	0.0%	2.54	7.7%

	Breeder		Finisher		Backgrounder		Lot Feeder			Dairy
	#	%	#	%	#	%	#	%	#	%
j. Be confident that industry QA systems will help ensure growth of the markets for your products	2.50	16.9%	2.66	11.0%	3.00	12.5%	3.00	14.3%	2.85	0.0%
k. Have a cost effective approach to all the product and environment QA systems you are required to have	3.00	13.3%	3.00	12.5%	2.50	12.5%	2.00	28.6%	3.00	0.0%
l. Know how to plan your property to balance your production with the environment	2.84	5.5%	3.00	4.1%	2.63	12.5%	3.00	0.0%	2.77	0.0%
m. Have the business planning skills to maximise your return on investment and improve your lifestyle	2.82	7.8%	2.89	5.5%	2.75	0.0%	2.57	14.3%	3.08	0.0%
n. Know how to attract, develop and retain good quality staff	2.68	10.8%	2.63	15.7%	2.50	12.5%	2.50	16.7%	2.54	0.0%
o. Be confident that beef is recognised in the market place for its value for money	2.64	14.3%	2.63	13.7%	2.50	25.0%	3.00	0.0%	2.54	0.0%
p. Be confident the industry supply chain post-farm-gate is improving its efficiency	2.52	14.9%	2.45	13.7%	2.13	37.5%	2.86	0.0%	2.62	0.0%
q. Know how to monitor things like soil, water and bio-diversity so you can manage the impact of your beef operation on the environment	2.80	8.4%	2.95	8.1%	2.00	12.5%	2.71	0.0%	3.08	0.0%

Southern Australian Beef Industry - Producer Survey

	Breeder			Finisher		Backgrounder		Lot Feeder			Dairy
	#	%	#	%	#	%	#	%	#	%
r. Understand the likely effects on your beef business of emerging environmental issues such as genetically modified organisms (GMOs., greenhouse gases and salinity	2.33	19.9%	2.46	18.9%	2.38	12.5%	2.00	28.6%	2.62	0.0%
s. Know the wider community has confidence that beef producers responsibly manage environment and animal welfare issues	2.40	17.0%	2.65	10.8%	2.38	37.5%	3.00	0.0%	2.54	7.7%
t. Have research results delivered in a way which suits your business and learning style	2.68	10.1%	2.51	14.9%	2.88	0.0%	2.57	0.0%	2.92	7.7%

Southern Australian Beef Industry - Producer Survey

		Male		Female	WA - NORTH		WA - SOUTH	
	#	%	#	%	#	%	#	%
Number	364		101		44		45	
80% or more Income from beef								
Yes	169	46.4%	50	49.5%	11	25.0%	23	51.1%
No	195	53.6%	51	50.5%	33	75.0%	22	48.9%
Total	364	100.0%	101	100.0%	44	100.0%	45	100.0%
Gross income from beef								
Less than $100,000	229	62.9%	83	82.2%	32	72.7%	32	71.1%
Between $100k and $200k	74	20.3%	10	9.9%	8	18.2%	8	17.8%
Over $200,000	61	16.8%	8	7.9%	4	9.1%	5	11.1%
Total	364	100.0%	101	100.0%	44	100.0%	45	100.0%
Category								
Small Beef	98	26.9%	39	38.6%	4	9.1%	16	35.6%
Medium Beef	31	8.5%	5	5.0%	4	9.1%	4	8.9%
Large Beef	40	11.0%	6	5.9%	3	6.8%	3	6.7%
Small Mixed	131	36.0%	44	43.6%	28	63.6%	16	35.6%
Medium Mixed	43	11.8%	5	5.0%	4	9.1%	4	8.9%
Large Mixed	21	5.8%	2	2.0%	1	2.3%	2	4.4%
Total	364	100.0%	101	100.0%	44	100.0%	45	100.0%
State								
NSW - NORTH	60	16.5%	17	16.8%	0	0.0%	0	0.0%
NSW - SOUTH	42	11.5%	13	12.9%	0	0.0%	0	0.0%
SA - SOUTH EAST	28	7.7%	11	10.9%	0	0.0%	0	0.0%
SA - THE REST	12	3.3%	4	4.0%	0	0.0%	0	0.0%
TAS	80	22.0%	17	16.8%	0	0.0%	0	0.0%
VIC	70	19.2%	22	21.8%	0	0.0%	0	0.0%
WA - NORTH	36	9.9%	8	7.9%	44	100.0%	0	0.0%
WA - SOUTH	36	9.9%	9	8.9%	0	0.0%	45	100.0%
Total	364	100.0%	101	100.0%	44	100.0%	45	100.0%

Southern Australian Beef Industry - Producer Survey

		Male		Female	WA - NORTH		WA - SOUTH	
	#	%	#	%	#	%	#	%
Principal beef business								
Breeder	288	79.1%	72	71.3%	38	86.4%	31	68.9%
Finisher	57	15.7%	19	18.8%	4	9.1%	7	15.6%
Backgrounder	6	1.6%	3	3.0%	0	0.0%	2	4.4%
Lot Feeder	4	1.1%	3	3.0%	2	4.5%	1	2.2%
Dairy	9	2.5%	4	4.0%	0	0.0%	4	8.9%
Total	364	100.0%	101	100.0%	44	100.0%	45	100.0%
Gender								
Male	364	100.0%	0	0.0%	36	81.8%	36	80.0%
Female	0	0.0%	101	100.0%	8	18.2%	9	20.0%
Total	364	100.0%	101	100.0%	44	100.0%	45	100.0%
Age								
Less than 20	2	0.5%	0	0.0%	0	0.0%	0	0.0%
20-39	51	14.0%	18	17.8%	9	20.5%	2	4.4%
40-49	90	24.7%	28	27.7%	12	27.3%	17	37.8%
50-59	117	32.1%	42	41.6%	16	36.4%	11	24.4%
60-74	86	23.6%	13	12.9%	7	15.9%	12	26.7%
75 and over	18	4.9%	0	0.0%	0	0.0%	3	6.7%
Total	364	100.0%	101	100.0%	44	100.0%	45	100.0%
Others Involved in Decision Making								
Spouse	177	55.3%	80	72.7%	25	64.1%	26	65.0%
Parents	30	9.4%	3	2.7%	3	7.7%	0	0.0%
Siblings	35	10.9%	5	4.5%	3	7.7%	6	15.0%
Business Partner	7	2.2%	2	1.8%	1	2.6%	1	2.5%
Other (Children)	71	22.2%	20	18.2%	7	17.9%	7	17.5%
Total	320	100.0%	110	100.0%	39	100.0%	40	100.0%

Southern Australian Beef Industry - Producer Survey

	Male		Female		WA - NORTH		WA - SOUTH	
	#	%	#	%	#	%	#	%
Property size (hectares)								
Average	15381		2542		1721		586	
Median	486		235		1200		240	
Std Dev	262382		12901		1783		948	
Average annual rainfall (mm)								
Average	760		725		511		915	
Median	750		711		500		900	
Std Dev	310		271		167		167	
Total number of cattle								
Average	570		423		312		330	
Median	200		120		145		200	
Std Dev	1967		1008		397		415	
Would use EBVs								
Yes	240	65.9%	56	55.4%	24	54.5%	27	60.0%
No	124	34.1%	45	44.6%	20	45.5%	18	40.0%
	364	100.0%	101	100.0%	44	100.0%	45	100.0%
Accurate cost								
Yes	143	39.3%	50	49.5%	19	43.2%	18	40.0%
No	221	60.7%	51	50.5%	25	56.8%	27	60.0%
	364	100.0%	101	100.0%	44	100.0%	45	100.0%
Q4. MLA member								
Yes	186	51.1%	55	54.5%	15	34.1%	14	31.1%
No	178	48.9%	46	45.5%	29	65.9%	31	68.9%
	364	100.0%	101	100.0%	44	100.0%	45	100.0%

		Male		Female	WA - NORTH		WA - SOUTH	
	#	%	#	%	#	%	#	%
ATTITUDES	**A&SA%**	**D&SD%**	**A&SA%**	**D&SD%**	**A&SA%**	**D&SD%**	**A&SA%**	**D&SD%**
1. Cloning and gene technologies will be important in the beef industry in the	52.5%	29.9%	48.5%	26.7%	43.2%	45.5%	44.4%	28.9%
2. The most effective way to achieve market specifications on my property is to use cattle	26.1%	49.2%	22.8%	50.5%	25.0%	47.7%	26.7%	46.7%
3. Producers that use supplementary feeding make more money	41.2%	42.3%	44.6%	33.7%	59.1%	27.3%	57.8%	26.7%
4. Investing in plant breeding is more likely to improve my bottom line than an equivalent	40.1%	32.7%	29.7%	41.6%	52.3%	27.3%	37.8%	28.9%
5. Grazing management is more effective than chemical or insects for weed control	63.5%	24.7%	67.3%	18.8%	72.7%	13.6%	68.9%	22.2%
6. Pasture productivity is the most important business profit driver	89.0%	5.5%	80.2%	7.9%	79.5%	13.6%	91.1%	4.4%
7. High stocking rates increase animal health problems	74.5%	19.8%	65.3%	25.7%	81.8%	18.2%	73.3%	20.0%
8. Planting more trees on my farm would improve my profitability	41.2%	46.7%	37.6%	50.5%	50.0%	43.2%	44.4%	44.4%
9. I should be financially rewarded for environmentally sustainable beef production	84.3%	9.1%	86.1%	7.9%	86.4%	6.8%	84.4%	13.3%

		Male		Female	WA - NORTH		WA - SOUTH	
	#	%	#	%	#	%	#	%
10. Government environmental policy will have a negative impact on my beef business in the future	48.4%	33.5%	30.7%	34.7%	43.2%	40.9%	53.3%	24.4%
11. Increasing bio-diversity (flora and fauna) should be an important part of managing my property	72.5%	17.9%	68.3%	15.8%	68.2%	22.7%	64.4%	17.8%
12. The beef industry of the future will require QA and certification to maintain market access	86.3%	9.3%	86.1%	5.9%	84.1%	11.4%	80.0%	13.3%
13. The beef industry should invest in convincing consumers that beef is a healthy food	97.0%	1.4%	93.1%	5.0%	95.5%	4.5%	100.0%	0.0%
14. Using new on-farm technologies will give me a market edge in the future	77.7%	11.3%	82.2%	7.9%	68.2%	20.5%	86.7%	11.1%
15. New research is needed to identify new on-farm technologies	81.9%	7.7%	76.2%	12.9%	75.0%	13.6%	91.1%	4.4%
16. Users of MLA's research products should pay a commercial price for them	58.8%	26.6%	57.4%	22.8%	72.7%	15.9%	55.6%	28.9%
17. The MLA levy should be used for on-farm rather than off-farm research, development and delivery	40.4%	31.3%	52.5%	17.8%	40.9%	29.5%	42.2%	24.4%
18. Protecting the environment is more important to me than profit	33.0%	42.6%	29.7%	38.6%	50.0%	36.4%	40.0%	33.3%

Southern Australian Beef Industry - Producer Survey

		Male		Female	WA - NORTH		WA - SOUTH	
	#	%	#	%	#	%	#	%
19. It is worthwhile investing in research to reduce the amount of feed consumed by cattle to turn off a set amount of beef	83.5%	12.4%	63.4%	20.8%	70.5%	25.0%	80.0%	11.1%
20. I need to develop a succession or retirement plan	75.3%	19.2%	72.3%	22.8%	77.3%	22.7%	68.9%	22.2%

	Male		Female		WA - NORTH		WA - SOUTH	
	#	%	#	%	#	%	#	%
RANKING % OF TOTAL	Average	Top 5	Average	Top 5	Average	Top 5	Average	Top 5
a. Know how to control and manage diseases and health	6.4%	43.6%	6.9%	56.0%	6.7%	45.5%	6.1%	44.4%
b. Understand how to control weeds, insect pests and vertebrate pests (e.g. rabbits, foxes, kangaroos. on your property	4.3%	17.8%	5.0%	23.0%	4.4%	13.6%	5.1%	24.4%
c. Have access to new pasture varieties to improve cattle production and the environment on your farm	5.5%	28.6%	5.5%	30.0%	6.3%	43.2%	5.8%	35.6%
d. Know how to maximise feed from your pastures without degrading the land	6.5%	41.4%	6.3%	43.0%	6.8%	45.5%	6.7%	48.9%
e. Know how to maximise beef production from the feed resources on your property	6.7%	48.3%	6.9%	54.0%	7.0%	59.1%	6.7%	48.9%
f. Know how to effectively use fertilisers and avoid adverse effects on the soil and water on your property	5.5%	24.7%	5.9%	32.0%	5.4%	31.8%	5.7%	22.2%
g. Have the ability to continuously improve the genetics of your cattle	5.0%	24.7%	5.0%	26.0%	5.3%	31.8%	5.0%	24.4%
h. Know how to identify market specifications and trends for the cattle you produce	5.4%	27.2%	5.6%	23.0%	5.4%	13.6%	5.2%	24.4%
i. Have the knowledge and skills to adapt your production system to meet market specifications	5.7%	29.2%	5.7%	29.0%	5.7%	29.5%	5.4%	22.2%

		Male		Female	WA - NORTH		WA - SOUTH	
	#	%	#	%	#	%	#	%
j. Be confident that industry QA systems will help ensure growth of the markets for your products	4.5%	20.3%	4.4%	13.0%	4.4%	18.2%	4.7%	26.7%
k. Have a cost effective approach to all the product and environment QA systems you are required to have	4.2%	13.3%	4.5%	17.0%	4.6%	6.8%	4.3%	17.8%
l. Know how to plan your property to balance your production with the environment	5.1%	26.1%	5.1%	23.0%	4.8%	27.3%	4.7%	15.6%
m. Have the business planning skills to maximise your return on investment and improve your lifestyle	5.8%	35.6%	5.7%	36.0%	5.7%	29.5%	5.4%	35.6%
n. Know how to attract, develop and retain good quality staff	2.6%	9.2%	2.0%	7.0%	2.5%	9.1%	2.9%	15.6%
o. Be confident that beef is recognised in the market place for its value for money	5.9%	33.9%	5.1%	22.0%	5.6%	27.3%	5.8%	31.1%
p. Be confident the industry supply chain post-farm-gate is improving its efficiency	5.1%	23.3%	5.0%	23.0%	4.6%	18.2%	5.4%	22.2%
q. Know how to monitor things like soil, water and bio-diversity so you can manage the impact of your beef operation on the environment	4.2%	12.5%	4.2%	12.0%	4.1%	15.9%	4.4%	11.1%

		Male		Female	WA - NORTH		WA - SOUTH	
	#	%	#	%	#	%	#	%
r. Understand the likely effects on your beef business of emerging environmental issues such as genetically modified organisms (GMOs., greenhouse gases and salinity	3.6%	10.6%	3.8%	9.0%	3.3%	11.4%	3.5%	6.7%
s. Know the wider community has confidence that beef producers responsibly manage environment and animal welfare issues	4.4%	20.0%	4.2%	13.0%	3.8%	13.6%	4.1%	17.8%
t. Have research results delivered in a way which suits your business and learning style	3.6%	9.7%	3.3%	9.0%	3.5%	9.1%	3.2%	4.4%

	Male			Female	WA - NORTH		WA - SOUTH	
	#	%	#	%	#	%	#	%
SATISFACTION	Average	Poor	Average	Poor	Average	Poor	Average	Poor
a. Know how to control and manage diseases and health problems with your cattle	3.18	6.0%	3.16	5.1%	3.11	6.8%	3.30	2.3%
b. Understand how to control weeds, insect pests and vertebrate pests (e.g. rabbits, foxes, kangaroos. on your property	3.19	5.1%	3.14	9.2%	3.25	9.1%	3.29	4.4%
c. Have access to new pasture varieties to improve cattle production and the environment on your farm	3.14	6.0%	3.03	6.1%	3.16	4.5%	3.11	6.8%
d. Know how to maximise feed from your pastures without degrading the land	3.05	4.2%	2.95	7.2%	3.02	6.8%	2.98	4.4%
e. Know how to maximise beef production from the feed resources on your property	3.01	5.9%	2.89	4.1%	2.91	4.5%	3.07	0.0%
f. Know how to effectively use fertilisers and avoid adverse effects on the soil and water on your property	2.99	7.2%	2.97	4.2%	3.16	2.3%	3.23	6.8%
g. Have the ability to continuously improve the genetics of your cattle	3.18	6.0%	3.09	6.1%	3.18	4.5%	3.20	0.0%
h. Know how to identify market specifications and trends for the cattle you produce	2.87	7.7%	2.89	5.1%	2.57	6.8%	2.86	4.5%
i. Have the knowledge and skills to adapt your production system to meet market specifications	2.84	6.3%	2.78	4.1%	2.59	6.8%	2.78	6.7%

		Male		Female		WA - NORTH		WA - SOUTH
	#	%	#	%	#	%	#	%
j. Be confident that industry QA systems will help ensure growth of the markets for your products	2.59	15.9%	2.43	13.3%	2.52	15.9%	2.59	11.4%
k. Have a cost effective approach to all the product and environment QA systems you are required to have	3.00	13.5%	2.00	11.2%	2.00	11.9%	3.00	9.1%
l. Know how to plan your property to balance your production with the environment	2.87	5.1%	2.84	5.1%	2.84	4.5%	2.84	9.1%
m. Have the business planning skills to maximise your return on investment and improve your lifestyle	2.88	6.8%	2.67	8.2%	2.82	11.4%	2.95	2.3%
n. Know how to attract, develop and retain good quality staff	2.71	10.7%	2.51	14.0%	2.55	19.0%	2.56	9.3%
o. Be confident that beef is recognised in the market place for its value for money	2.64	13.9%	2.65	13.3%	2.82	15.9%	2.77	11.4%
p. Be confident the industry supply chain post-farm-gate is improving its efficiency	2.50	16.2%	2.54	8.2%	2.73	4.5%	2.41	15.9%
q. Know how to monitor things like soil, water and bio-diversity so you can manage the impact of your beef operation on the environment	2.85	8.0%	2.71	8.2%	2.82	6.8%	2.80	9.1%

		Male		Female	WA - NORTH		WA - SOUTH	
	#	%	#	%	#	%	#	%
r. Understand the likely effects on your beef business of emerging environmental issues such as genetically modified organisms (GMOs., greenhouse gases and salinity	2.32	20.5%	2.49	14.3%	2.50	15.9%	2.50	13.6%
s. Know the wider community has confidence that beef producers responsibly manage environment and animal welfare issues	2.48	15.3%	2.36	17.5%	2.52	9.5%	2.59	4.5%
t. Have research results delivered in a way which suits your business and learning style	2.65	11.1%	2.70	8.3%	2.55	9.1%	2.68	11.4%

Southern Australian Beef Industry - Producer Survey

	less than 20 yrs		20-39 yrs		40-49 yrs		50-59 yrs		60-74 yrs		75 yrs +	
	#	%	#	%	#	%	#	%	#	%	#	%
Number	2		69		118		159		99		18	
80% or more Income from beef												
Yes	1	50.0%	27	39.1%	52	44.1%	76	47.8%	53	53.5%	10	55.6%
No	1	50.0%	42	60.9%	66	55.9%	83	52.2%	46	46.5%	8	44.4%
Total	2	100.0%	69	100.0%	118	100.0%	159	100.0%	99	100.0%	18	100.0%
Gross income from beef												
Less than $100,000	2	100.0%	43	62.3%	75	63.6%	103	64.8%	76	76.8%	13	72.2%
Between $100k and $200k	0	0.0%	12	17.4%	19	16.1%	29	18.2%	19	19.2%	5	27.8%
Over $200,000	0	0.0%	14	20.3%	24	20.3%	27	17.0%	4	4.0%	0	0.0%
Total	2	100.0%	69	100.0%	118	100.0%	159	100.0%	99	100.0%	18	100.0%
Category												
Small Beef	1	50.0%	16	23.2%	31	26.3%	42	26.4%	39	39.4%	8	44.4%
Medium Beef	0	0.0%	3	4.3%	7	5.9%	12	7.5%	12	12.1%	2	11.1%
Large Beef	0	0.0%	8	11.6%	14	11.9%	22	13.8%	2	2.0%	0	0.0%
Small Mixed	1	50.0%	27	39.1%	44	37.3%	61	38.4%	37	37.4%	5	27.8%
Medium Mixed	0	0.0%	9	13.0%	12	10.2%	17	10.7%	7	7.1%	3	16.7%
Large Mixed	0	0.0%	6	8.7%	10	8.5%	5	3.1%	2	2.0%	0	0.0%
Total	2	100.0%	69	100.0%	118	100.0%	159	100.0%	99	100.0%	18	100.0%
State												
NSW - NORTH	0	0.0%	9	13.0%	19	16.1%	31	19.5%	15	15.2%	3	16.7%
NSW - SOUTH	0	0.0%	12	17.4%	10	8.5%	18	11.3%	14	14.1%	1	5.6%
SA - SOUTH EAST	1	50.0%	9	13.0%	5	4.2%	18	11.3%	6	6.1%	0	0.0%
SA - THE REST	0	0.0%	5	7.2%	7	5.9%	1	0.6%	3	3.0%	0	0.0%
TAS	1	50.0%	15	21.7%	31	26.3%	29	18.2%	16	16.2%	5	27.8%
VIC	0	0.0%	8	11.6%	17	14.4%	35	22.0%	26	26.3%	6	33.3%
WA - NORTH	0	0.0%	9	13.0%	12	10.2%	16	10.1%	7	7.1%	0	0.0%
WA - SOUTH	0	0.0%	2	2.9%	17	14.4%	11	6.9%	12	12.1%	3	16.7%
Total	2	100.0%	69	100.0%	118	100.0%	159	100.0%	99	100.0%	18	100.0%

Southern Australian Beef Industry - Producer Survey

	less than 20 yrs		20-39 yrs		40-49 yrs		50-59 yrs		60-74 yrs		75 yrs +	
	#	%	#	%	#	%	#	%	#	%	#	%
Principal beef business												
Breeder	2	100.0%	53	76.8%	89	75.4%	125	78.6%	76	76.8%	15	83.3%
Finisher	0	0.0%	13	18.8%	20	16.9%	26	16.4%	14	14.1%	3	16.7%
Backgrounder	0	0.0%	0	0.0%	1	0.8%	4	2.5%	4	4.0%	0	0.0%
Lot Feeder	0	0.0%	0	0.0%	5	4.2%	1	0.6%	1	1.0%	0	0.0%
Dairy	0	0.0%	3	4.3%	3	2.5%	3	1.9%	4	4.0%	0	0.0%
Total	2	100.0%	69	100.0%	118	100.0%	159	100.0%	99	100.0%	18	100.0%
Gender												
Male	2	100.0%	51	73.9%	90	76.3%	117	73.6%	86	86.9%	18	100.0%
Female	0	0.0%	18	26.1%	28	23.7%	42	26.4%	13	13.1%	0	0.0%
Total	2	100.0%	69	100.0%	118	100.0%	159	100.0%	99	100.0%	18	100.0%
Age												
Less than 20	2	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
20-39	0	0.0%	69	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
40-49	0	0.0%	0	0.0%	118	100.0%	0	0.0%	0	0.0%	0	0.0%
50-59	0	0.0%	0	0.0%	0	0.0%	159	100.0%	0	0.0%	0	0.0%
60-74	0	0.0%	0	0.0%	0	0.0%	0	0.0%	99	100.0%	0	0.0%
75 and over	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	18	100.0%
Total	2	100.0%	69	100.0%	118	100.0%	159	100.0%	99	100.0%	18	100.0%
Others Involved in Decision Making												
Spouse	0	0.0%	35	42.2%	70	68.0%	94	66.2%	52	59.1%	6	50.0%
Parents	2	100.0%	22	26.5%	7	6.8%	1	0.7%	1	1.1%	0	0.0%
Siblings	0	0.0%	14	16.9%	9	8.7%	9	6.3%	8	9.1%	0	0.0%
Business Partner	0	0.0%	3	3.6%	3	2.9%	2	1.4%	1	1.1%	0	0.0%
Other (Children)	0	0.0%	9	10.8%	14	13.6%	36	25.4%	26	29.5%	6	50.0%
Total	2	100.0%	83	100.0%	103	100.0%	142	100.0%	88	100.0%	12	100.0%

Southern Australian Beef Industry - Producer Survey

	less than 20 yrs		20-39 yrs		40-49 yrs		50-59 yrs		60-74 yrs		75 yrs +	
	#	%	#	%	#	%	#	%	#	%	#	%
Property size (hectares)												
Average	25040		2335		2541		32776		1093		662	
Median	25040		1200		407		440		283		239	
Std Dev	33266		4601		11469		396442		3754		861	
Average annual rainfall (mm)												
Average	330		669		752		749		827		763	
Median	330		650		750		711		762		762	
Std Dev	#DIV/0!		259		248		370		266		273	
Total number of cattle												
Average	270		526		588		648		379		208	
Median	270		230		200		178		140		120	
Std Dev	113		765		1032		2846		800		182	
Would use EBVs												
Yes	1	50.0%	50	72.5%	82	69.5%	96	60.4%	56	56.6%	11	61.1%
No	1	50.0%	19	27.5%	36	30.5%	63	39.6%	43	43.4%	7	38.9%
	2	100.0%	69	100.0%	118	100.0%	159	100.0%	99	100.0%	18	100.0%
Accurate cost												
Yes	0	0.0%	32	46.4%	52	44.1%	76	47.8%	29	29.3%	4	22.2%
No	2	100.0%	37	53.6%	66	55.9%	83	52.2%	70	70.7%	14	77.8%
	2	100.0%	69	100.0%	118	100.0%	159	100.0%	99	100.0%	18	100.0%
Q4. MLA member												
Yes	0	0.0%	35	50.7%	63	53.4%	93	58.5%	42	42.4%	8	44.4%
No	2	100.0%	34	49.3%	55	46.6%	66	41.5%	57	57.6%	10	55.6%
	2	100.0%	69	100.0%	118	100.0%	159	100.0%	99	100.0%	18	100.0%

Southern Australian Beef Industry - Producer Survey

ATTITUDES	less than 20 yrs		20-39 yrs		40-49 yrs		50-59 yrs		60-74 yrs		75 yrs +	
	#	%	#	%	#	%	#	%	#	%	#	%
	A&SA%	D&SD%	A&SA%	D&SD%	A&SA%	D&SD%	A&SA%	D&SD%	A&SA%	D&SD%	A&SA%	D&SD%
1. Cloning and gene technologies will be important in the beef industry in the	0.0%	50.0%	59.4%	21.7%	52.5%	28.8%	51.6%	31.4%	46.5%	30.3%	50.0%	33.3%
2. The most effective way to achieve market specifications on my property is to use cattle	100.0%	0.0%	23.2%	50.7%	25.4%	49.2%	24.5%	52.8%	29.3%	41.4%	11.1%	66.7%
3. Producers that use supplementary feeding make more money	50.0%	50.0%	36.2%	52.2%	43.2%	40.7%	45.3%	36.5%	38.4%	38.4%	44.4%	38.9%
4. Investing in plant breeding is more likely to improve my bottom line than an equivalent	0.0%	50.0%	39.1%	34.8%	37.3%	35.6%	37.1%	37.1%	39.4%	29.3%	38.9%	33.3%
5. Grazing management is more effective than chemical or insects for weed control	100.0%	0.0%	55.1%	23.2%	66.1%	22.9%	61.6%	26.4%	71.7%	19.2%	66.7%	27.8%
6. Pasture productivity is the most important business profit driver	100.0%	0.0%	81.2%	7.2%	83.1%	10.2%	88.7%	5.7%	91.9%	2.0%	94.4%	0.0%
7. High stocking rates increase animal health problems	100.0%	0.0%	63.8%	33.3%	69.5%	22.0%	75.5%	19.5%	75.8%	15.2%	77.8%	16.7%
8. Planting more trees on my farm would improve my profitability	50.0%	50.0%	40.6%	40.6%	36.4%	53.4%	45.3%	45.9%	38.4%	46.5%	33.3%	55.6%
9. I should be financially rewarded for environmentally sustainable beef production	100.0%	0.0%	82.6%	7.2%	87.3%	8.5%	84.3%	8.2%	85.9%	11.1%	72.2%	11.1%

	less than 20 yrs		20-39 yrs		40-49 yrs		50-59 yrs		60-74 yrs		75 yrs +	
	#	%	#	%	#	%	#	%	#	%	#	%
10. Government environmental policy will have a negative impact on my beef business in the future	50.0%	0.0%	47.8%	29.0%	46.6%	31.4%	34.6%	38.4%	50.5%	34.3%	72.2%	27.8%
11. Increasing bio-diversity (flora and fauna) should be an important part of managing my property	50.0%	0.0%	76.8%	15.9%	72.9%	11.9%	76.1%	15.7%	60.6%	27.3%	66.7%	22.2%
12. The beef industry of the future will require QA and certification to maintain market access	100.0%	0.0%	89.9%	5.8%	85.6%	9.3%	88.1%	8.2%	82.8%	9.1%	77.8%	16.7%
13. The beef industry should invest in convincing consumers that beef is a healthy food	100.0%	0.0%	97.1%	0.0%	95.8%	2.5%	96.9%	2.5%	96.0%	1.0%	88.9%	11.1%
14. Using new on-farm technologies will give me a market edge in the future	100.0%	0.0%	76.8%	7.2%	78.0%	10.2%	78.6%	11.3%	82.8%	11.1%	66.7%	16.7%
15. New research is needed to identify new on-farm technologies	100.0%	0.0%	87.0%	4.3%	83.1%	8.5%	76.1%	10.7%	78.8%	10.1%	88.9%	5.6%
16. Users of MLA's research products should pay a commercial price for them	50.0%	50.0%	52.2%	26.1%	50.0%	32.2%	61.6%	27.0%	65.7%	18.2%	72.2%	11.1%
17. The MLA levy should be used for on-farm rather than off-farm research, development and delivery	0.0%	50.0%	39.1%	29.0%	35.6%	38.1%	47.2%	24.5%	45.5%	23.2%	61.1%	22.2%
18. Protecting the environment is more important to me than profit	0.0%	50.0%	31.9%	39.1%	33.1%	51.7%	28.9%	39.0%	36.4%	39.4%	38.9%	22.2%

Southern Australian Beef Industry - Producer Survey

	less than 20 yrs		20-39 yrs		40-49 yrs		50-59 yrs		60-74 yrs		75 yrs +	
	#	%	#	%	#	%	#	%	#	%	#	%
19. It is worthwhile investing in research to reduce the amount of feed consumed by cattle to turn off a set amount of beef	100.0%	0.0%	88.4%	8.7%	78.0%	12.7%	79.2%	14.5%	74.7%	19.2%	72.2%	16.7%
20. I need to develop a succession or retirement plan	100.0%	0.0%	84.1%	13.0%	78.8%	16.9%	75.5%	18.2%	64.6%	29.3%	55.6%	33.3%

	less than 20 yrs		20-39 yrs		40-49 yrs		50-59 yrs		60-74 yrs		75 yrs +	
	#	%	#	%	#	%	#	%	#	%	#	%
RANKING % OF TOTAL	Average	Top 5	Average	Top 5	Average	Top 5	Average	Top 5	Average	Top 5	Average	Top 5
a. Know how to control and manage diseases and health	7.1%	50.0%	6.0%	39.1%	6.6%	45.8%	6.4%	43.2%	7.0%	56.6%	6.4%	47.1%
b. Understand how to control weeds, insect pests and vertebrate pests (e.g. rabbits, foxes, kangaroos. on your property	5.5%	50.0%	4.0%	13.0%	4.3%	14.4%	4.4%	21.9%	4.7%	21.2%	5.2%	29.4%
c. Have access to new pasture varieties to improve cattle production and the environment on your farm	4.0%	0.0%	5.2%	27.5%	5.7%	28.0%	5.4%	28.4%	5.6%	34.3%	5.0%	17.6%
d. Know how to maximise feed from your pastures without degrading the land	4.8%	0.0%	6.6%	42.0%	6.6%	46.6%	6.5%	40.6%	6.3%	39.4%	5.9%	35.3%
e. Know how to maximise beef production from the feed resources on your property	7.6%	50.0%	6.9%	53.6%	6.9%	51.7%	6.7%	49.0%	6.6%	47.5%	5.8%	35.3%
f. Know how to effectively use fertilisers and avoid adverse effects on the soil and water on your property	4.0%	0.0%	5.1%	15.9%	5.8%	34.7%	5.6%	25.2%	5.6%	26.3%	5.7%	23.5%
g. Have the ability to continuously improve the genetics of your cattle	7.1%	50.0%	5.2%	21.7%	5.3%	30.5%	4.8%	22.6%	5.0%	25.3%	4.6%	17.6%
h. Know how to identify market specifications and trends for the cattle you produce	6.7%	50.0%	5.6%	29.0%	5.3%	24.6%	5.4%	23.9%	5.5%	28.3%	5.9%	35.3%
i. Have the knowledge and skills to adapt your production system to meet market specifications	7.1%	50.0%	5.7%	24.6%	5.7%	31.4%	5.8%	31.0%	5.5%	25.3%	6.0%	35.3%

	less than 20 yrs		20-39 yrs		40-49 yrs		50-59 yrs		60-74 yrs		75 yrs +	
	#	%	#	%	#	%	#	%	#	%	#	%
j. Be confident that industry QA systems will help ensure growth of the markets for your products	3.8%	0.0%	4.0%	10.1%	4.3%	16.9%	4.5%	21.3%	4.9%	24.2%	4.4%	11.8%
k. Have a cost effective approach to all the product and environment QA systems you are required to have	2.9%	0.0%	4.3%	18.8%	3.9%	11.0%	4.1%	9.0%	4.5%	21.2%	5.9%	23.5%
l. Know how to plan your property to balance your production with the environment	4.8%	50.0%	5.3%	30.4%	5.1%	28.8%	5.4%	25.8%	4.3%	13.1%	6.3%	47.1%
m. Have the business planning skills to maximise your return on investment and improve your lifestyle	5.5%	50.0%	6.4%	46.4%	5.8%	40.7%	5.6%	31.6%	5.6%	28.3%	5.7%	35.3%
n. Know how to attract, develop and retain good quality staff	2.4%	0.0%	2.9%	13.0%	2.3%	8.5%	2.3%	6.5%	2.6%	10.1%	2.9%	5.9%
o. Be confident that beef is recognised in the market place for its value for money	6.2%	50.0%	5.1%	21.7%	5.7%	24.6%	6.1%	40.0%	5.6%	32.3%	5.1%	29.4%
p. Be confident the industry supply chain post-farm-gate is improving its efficiency	7.4%	50.0%	5.2%	27.5%	5.0%	21.2%	5.1%	23.9%	5.2%	22.2%	4.3%	17.6%
q. Know how to monitor things like soil, water and bio-diversity so you can manage the impact of your beef operation on the environment ·	2.1%	0.0%	4.4%	11.6%	4.3%	11.0%	4.3%	14.2%	3.9%	11.1%	4.5%	17.6%

Southern Australian Beef Industry - Producer Survey

	less than 20 yrs			20-39 yrs			40-49 yrs			50-59 yrs			60-74 yrs			75 yrs +
	#	%	#	%	#	%	#	%	#	%	#	%
r. Understand the likely effects on your beef business of emerging environmental issues such as genetically modified organisms (GMOs., greenhouse gases and salinity	2.6%	0.0%	4.1%	13.0%	3.6%	4.2%	3.5%	13.5%	3.7%	9.1%	3.9%	17.6%
s. Know the wider community has confidence that beef producers responsibly manage environment and animal welfare issues	5.7%	0.0%	4.0%	21.7%	4.4%	17.8%	4.4%	18.1%	4.4%	19.2%	3.2%	11.8%
t. Have research results delivered in a way which suits your business and learning style	2.6%	0.0%	4.0%	18.8%	3.3%	7.6%	3.5%	10.3%	3.7%	5.1%	3.4%	5.9%

Southern Australian Beef Industry - Producer Survey

	less than 20 yrs		20-39 yrs		40-49 yrs		50-59 yrs		60-74 yrs		75 yrs +	
	#	%	#	%	#	%	#	%	#	%	#	%
SATISFACTION	Average	Poor	Average	Poor	Average	Poor	Average	Poor	Average	Poor	Average	Poor
a. Know how to control and manage diseases and health problems with your cattle	3.00	0.0%	3.25	2.9%	3.10	7.8%	3.12	5.8%	3.25	5.4%	3.53	5.9%
b. Understand how to control weeds, insect pests and vertebrate pests (e.g. rabbits, foxes, kangaroos. on your property	4.00	0.0%	3.29	0.0%	3.18	4.3%	3.14	9.7%	3.19	6.6%	2.88	5.9%
c. Have access to new pasture varieties to improve cattle production and the environment on your farm	4.00	0.0%	3.22	2.9%	3.10	5.2%	3.09	7.1%	3.10	6.5%	3.06	11.8%
d. Know how to maximise feed from your pastures without degrading the land	3.50	0.0%	2.97	4.3%	3.03	3.5%	2.99	5.2%	3.05	7.5%	3.41	0.0%
e. Know how to maximise beef production from the feed resources on your property	3.50	0.0%	3.07	2.9%	2.98	4.3%	2.97	7.1%	2.94	6.5%	3.00	5.9%
f. Know how to effectively use fertilisers and avoid adverse effects on the soil and water on your property	3.50	0.0%	3.15	4.4%	2.90	7.9%	2.98	7.9%	2.96	4.3%	3.06	5.9%
g. Have the ability to continuously improve the genetics of your cattle	3.50	0.0%	3.29	4.3%	3.20	4.4%	3.09	7.9%	3.17	5.3%	3.00	11.8%
h. Know how to identify market specifications and trends for the cattle you produce	3.50	0.0%	2.90	7.2%	2.81	8.7%	2.82	8.5%	2.93	4.3%	3.35	0.0%
i. Have the knowledge and skills to adapt your production system to meet market specifications	4.00	0.0%	2.91	0.0%	2.86	4.3%	2.75	7.8%	2.78	9.8%	3.12	0.0%

	less than 20 yrs		20-39 yrs		40-49 yrs		50-59 yrs		60-74 yrs		75 yrs +	
	#	%	#	%	#	%	#	%	#	%	#	%
j. Be confident that industry QA systems will help ensure growth of the markets for your products	4.00	0.0%	2.62	10.1%	2.56	13.9%	2.49	18.8%	2.58	14.0%	2.53	23.5%
k. Have a cost effective approach to all the product and environment QA systems you are required to have	3.50	0.0%	3.00	11.6%	3.00	8.8%	2.50	16.4%	3.00	15.1%	3.00	5.9%
l. Know how to plan your property to balance your production with the environment	3.00	0.0%	2.93	1.4%	2.86	3.5%	2.78	6.5%	2.90	8.6%	3.06	0.0%
m. Have the business planning skills to maximise your return on investment and improve your lifestyle	3.50	0.0%	2.96	2.9%	2.90	6.1%	2.74	9.9%	2.80	7.5%	2.88	5.9%
n. Know how to attract, develop and retain good quality staff	3.00	0.0%	2.56	13.2%	2.70	9.0%	2.71	10.3%	2.60	14.9%	2.76	11.8%
o. Be confident that beef is recognised in the market place for its value for money	3.50	0.0%	2.65	11.6%	2.58	13.9%	2.56	16.2%	2.74	12.9%	3.00	5.9%
p. Be confident the industry supply chain post-farm-gate is improving its efficiency	3.50	0.0%	2.45	13.0%	2.45	16.5%	2.50	14.9%	2.56	11.8%	2.81	18.8%
q. Know how to monitor things like soil, water and bio-diversity so you can manage the impact of your beef operation on the environment	3.50	0.0%	2.90	5.8%	2.80	7.0%	2.79	10.5%	2.78	8.6%	2.94	0.0%

Southern Australian Beef Industry - Producer Survey

	less than 20 yrs		20-39 yrs		40-49 yrs		50-59 yrs		60-74 yrs		75 yrs +	
	#	%	#	%	#	%	#	%	#	%	#	%
r. Understand the likely effects on your beef business of emerging environmental issues such as genetically modified organisms (GMOs., greenhouse gases and salinity	3.50	0.0%	2.54	14.5%	2.30	20.9%	2.30	22.1%	2.41	14.1%	2.00	29.4%
s. Know the wider community has confidence that beef producers responsibly manage environment and animal welfare issues	3.50	0.0%	2.51	8.7%	2.39	18.4%	2.38	17.5%	2.52	15.1%	2.88	17.6%
t. Have research results delivered in a way which suits your business and learning style	3.00	0.0%	2.59	14.5%	2.69	7.8%	2.60	12.5%	2.71	9.7%	2.94	0.0%

Southern Australian Beef Industry - Producer Survey

	Less than 39		Older than 60		Would use EBVs		Wld not use EBVs		Accurate cost - yes		Accurate cost - no	
	#	%	#	%	#	%	#	%	#	%	#	%
Number	71		117		296		169		193		272	
80% or more Income from beef												
Yes	28	39.4%	63	53.8%	139	47.0%	80	47.3%	91	47.2%	128	47.1%
No	43	60.6%	54	46.2%	157	53.0%	89	52.7%	102	52.8%	144	52.9%
Total	71	100.0%	117	100.0%	296	100.0%	169	100.0%	193	100.0%	272	100.0%
Gross income from beef												
Less than $100,000	45	63.4%	89	76.1%	184	62.2%	128	75.7%	110	57.0%	202	74.3%
Between $100k and $200k	12	16.9%	24	20.5%	60	20.3%	24	14.2%	40	20.7%	44	16.2%
Over $200,000	14	19.7%	4	3.4%	52	17.6%	17	10.1%	43	22.3%	26	9.6%
Total	71	100.0%	117	100.0%	296	100.0%	169	100.0%	193	100.0%	272	100.0%
Category												
Small Beef	17	23.9%	47	40.2%	80	27.0%	57	33.7%	44	22.8%	93	34.2%
Medium Beef	3	4.2%	14	12.0%	24	8.1%	12	7.1%	17	8.8%	19	7.0%
Large Beef	8	11.3%	2	1.7%	35	11.8%	11	6.5%	30	15.5%	16	5.9%
Small Mixed	28	39.4%	42	35.9%	104	35.1%	71	42.0%	66	34.2%	109	40.1%
Medium Mixed	9	12.7%	10	8.5%	36	12.2%	12	7.1%	23	11.9%	25	9.2%
Large Mixed	6	8.5%	2	1.7%	17	5.7%	6	3.6%	13	6.7%	10	3.7%
Total	71	100.0%	117	100.0%	296	100.0%	169	100.0%	193	100.0%	272	100.0%
State												
NSW - NORTH	9	12.7%	18	15.4%	53	17.9%	24	14.2%	39	20.2%	38	14.0%
NSW - SOUTH	12	16.9%	15	12.8%	41	13.9%	14	8.3%	24	12.4%	31	11.4%
SA - SOUTH EAST	10	14.1%	6	5.1%	21	7.1%	18	10.7%	21	10.9%	18	6.6%
SA - THE REST	5	7.0%	3	2.6%	8	2.7%	8	4.7%	7	3.6%	9	3.3%
TAS	16	22.5%	21	17.9%	67	22.6%	30	17.8%	28	14.5%	69	25.4%
VIC	8	11.3%	32	27.4%	55	18.6%	37	21.9%	37	19.2%	55	20.2%
WA - NORTH	9	12.7%	7	6.0%	24	8.1%	20	11.8%	19	9.8%	25	9.2%
WA - SOUTH	2	2.8%	15	12.8%	27	9.1%	18	10.7%	18	9.3%	27	9.9%
Total	71	100.0%	117	100.0%	296	100.0%	169	100.0%	193	100.0%	272	100.0%

Southern Australian Beef Industry - Producer Survey

	Less than 39		Older than 60		Would use EBVs		Wld not use EBVs		Accurate cost - yes		Accurate cost - no	
	#	%	#	%	#	%	#	%	#	%	#	%
Principal beef business												
Breeder	55	77.5%	91	77.8%	241	81.4%	119	70.4%	153	79.3%	207	76.1%
Finisher	13	18.3%	17	14.5%	37	12.5%	39	23.1%	27	14.0%	49	18.0%
Backgrounder	0	0.0%	4	3.4%	4	1.4%	5	3.0%	5	2.6%	4	1.5%
Lot Feeder	0	0.0%	1	0.9%	5	1.7%	2	1.2%	3	1.6%	4	1.5%
Dairy	3	4.2%	4	3.4%	9	3.0%	4	2.4%	5	2.6%	8	2.9%
Total	71	100.0%	117	100.0%	296	100.0%	169	100.0%	193	100.0%	272	100.0%
Gender												
Male	53	74.6%	104	88.9%	240	81.1%	124	73.4%	143	74.1%	221	81.3%
Female	18	25.4%	13	11.1%	56	18.9%	45	26.6%	50	25.9%	51	18.8%
Total	71	100.0%	117	100.0%	296	100.0%	169	100.0%	193	100.0%	272	100.0%
Age												
Less than 20	2	2.8%	0	0.0%	1	0.3%	1	0.6%	0	0.0%	2	0.7%
20-39	69	97.2%	0	0.0%	50	16.9%	19	11.2%	32	16.6%	37	13.6%
40-49	0	0.0%	0	0.0%	82	27.7%	36	21.3%	52	26.9%	66	24.3%
50-59	0	0.0%	0	0.0%	96	32.4%	63	37.3%	76	39.4%	83	30.5%
60-74	0	0.0%	99	84.6%	56	18.9%	43	25.4%	29	15.0%	70	25.7%
75 and over	0	0.0%	18	15.4%	11	3.7%	7	4.1%	4	2.1%	14	5.1%
Total	71	100.0%	117	100.0%	296	100.0%	169	100.0%	193	100.0%	272	100.0%
Others Involved in Decision Making												
Spouse	35	41.2%	58	58.0%	158	57.5%	99	63.9%	107	58.8%	150	60.5%
Parents	24	28.2%	1	1.0%	25	9.1%	8	5.2%	17	9.3%	16	6.5%
Siblings	14	16.5%	8	8.0%	30	10.9%	10	6.5%	15	8.2%	25	10.1%
Business Partner	3	3.5%	1	1.0%	7	2.5%	2	1.3%	4	2.2%	5	2.0%
Other (Children)	9	10.6%	32	32.0%	55	20.0%	36	23.2%	39	21.4%	52	21.0%
Total	85	100.0%	100	100.0%	275	100.0%	155	100.0%	182	100.0%	248	100.0%

Southern Australian Beef Industry - Producer Survey

	Less than 39		Older than 60		Would use EBVs		Wld not use EBVs		Accurate cost - yes		Accurate cost - no	
	#	%	#	%	#	%	#	%	#	%	#	%
Property size (hectares)												
Average	2974		1027		19170		987		2342		19818	
Median	1200		283		522		261		644		340	
Std Dev	7120		3470		290617		1972		9472		303119	
Average annual rainfall (mm)												
Average	664		817		777		710		735		768	
Median	645		762		750		711		711		750	
Std Dev	261		267		314		279		247		339	
Total number of cattle												
Average	519		353		667		312		655		457	
Median	230		130		240		120		232		142	
Std Dev	755		741		2210		577		1110		2162	
Would use EBVs												
Yes	51	71.8%	67	57.3%	296	100.0%	0	0.0%	123	63.7%	173	63.6%
No	20	28.2%	50	42.7%	0	0.0%	169	100.0%	70	36.3%	99	36.4%
	71	100.0%	117	100.0%	296	100.0%	169	100.0%	193	100.0%	272	100.0%
Accurate cost												
Yes	32	45.1%	33	28.2%	123	41.6%	70	41.4%	193	100.0%	0	0.0%
No	39	54.9%	84	71.8%	173	58.4%	99	58.6%	0	0.0%	272	100.0%
	71	100.0%	117	100.0%	296	100.0%	169	100.0%	193	100.0%	272	100.0%
Q4. MLA member												
Yes	35	49.3%	50	42.7%	176	59.5%	65	38.5%	113	58.5%	128	47.1%
No	36	50.7%	67	57.3%	120	40.5%	104	61.5%	80	41.5%	144	52.9%
	71	100.0%	117	100.0%	296	100.0%	169	100.0%	193	100.0%	272	100.0%

Southern Australian Beef Industry - Producer Survey

ATTITUDES	Less than 39		Older than 60		Would use EBVs		Wld not use EBVs		Accurate cost - yes		Accurate cost - no	
	#	%	#	%	#	%	#	%	#	%	#	%
	A&SA%	D&SD%	A&SA%	D&SD%	A&SA%	D&SD%	A&SA%	D&SD%	A&SA%	D&SD%	A&SA%	D&SD%
1. Cloning and gene technologies will be important in the beef industry in the	57.7%	22.5%	47.0%	30.8%	56.4%	25.7%	43.2%	35.5%	53.4%	26.4%	50.4%	31.3%
2. The most effective way to achieve market specifications on my property is to use cattle	25.4%	49.3%	26.5%	45.3%	28.7%	45.3%	19.5%	56.8%	23.3%	52.3%	26.8%	47.4%
3. Producers that use supplementary feeding make more money	36.6%	52.1%	39.3%	38.5%	42.2%	41.2%	41.4%	39.1%	42.5%	41.5%	41.5%	39.7%
4. Investing in plant breeding is more likely to improve my bottom line than an equivalent	38.0%	35.2%	39.3%	29.9%	37.5%	36.5%	38.5%	31.4%	35.2%	33.2%	39.7%	35.7%
5. Grazing management is more effective than chemical or insects for weed control	56.3%	22.5%	70.9%	20.5%	62.8%	24.0%	66.9%	22.5%	62.2%	22.3%	65.8%	24.3%
6. Pasture productivity is the most important business profit driver	81.7%	7.0%	92.3%	1.7%	87.5%	5.4%	86.4%	7.1%	85.5%	9.3%	88.2%	3.7%
7. High stocking rates increase animal health problems	64.8%	32.4%	76.1%	15.4%	69.6%	23.6%	77.5%	16.6%	68.4%	25.4%	75.4%	18.0%
8. Planting more trees on my farm would improve my profitability	40.8%	40.8%	37.6%	47.9%	40.2%	45.6%	40.8%	50.9%	37.3%	49.7%	42.6%	46.0%
9. I should be financially rewarded for environmentally sustainable beef production	83.1%	7.0%	83.8%	11.1%	86.1%	6.4%	82.2%	13.0%	83.9%	8.3%	85.3%	9.2%

Southern Australian Beef Industry - Producer Survey

	Less than 39		Older than 60		Would use EBVs		Wld not use EBVs		Accurate cost - yes		Accurate cost - no	
	#	%	#	%	#	%	#	%	#	%	#	%
10. Government environmental policy will have a negative impact on my beef business in the future	47.9%	28.2%	53.8%	33.3%	45.6%	33.4%	42.6%	34.3%	42.5%	32.1%	46.0%	34.9%
11. Increasing bio-diversity (flora and fauna) should be an important part of managing my property	76.1%	15.5%	61.5%	26.5%	74.3%	13.9%	66.9%	23.7%	74.1%	15.0%	69.9%	19.1%
12. The beef industry of the future will require QA and certification to maintain market access	90.1%	5.6%	82.1%	10.3%	89.2%	6.4%	81.1%	12.4%	85.0%	10.4%	87.1%	7.4%
13. The beef industry should invest in convincing consumers that beef is a healthy food	97.2%	0.0%	94.9%	2.6%	96.3%	2.0%	95.9%	2.4%	95.9%	2.1%	96.3%	2.2%
14. Using new on-farm technologies will give me a market edge in the future	77.5%	7.0%	80.3%	12.0%	82.1%	8.1%	72.8%	14.8%	77.7%	10.4%	79.4%	10.7%
15. New research is needed to identify new on-farm technologies	87.3%	4.2%	80.3%	9.4%	83.4%	8.1%	75.7%	10.1%	76.7%	10.9%	83.5%	7.4%
16. Users of MLA's research products should pay a commercial price for them	52.1%	26.8%	66.7%	17.1%	58.1%	26.0%	59.2%	25.4%	53.9%	27.5%	61.8%	24.6%
17. The MLA levy should be used for on-farm rather than off-farm research, development and delivery	38.0%	29.6%	47.9%	23.1%	39.9%	29.1%	48.5%	27.2%	38.9%	29.5%	46.0%	27.6%
18. Protecting the environment is more important to me than profit	31.0%	39.4%	36.8%	36.8%	32.1%	41.6%	32.5%	42.0%	28.0%	52.3%	35.3%	34.2%

Southern Australian Beef Industry - Producer Survey

	Less than 39		Older than 60		Would use EBVs		Wld not use EBVs		Accurate cost - yes		Accurate cost - no	
	#	%	#	%	#	%	#	%	#	%	#	%
19. It is worthwhile investing in research to reduce the amount of feed consumed by cattle to turn off a set amount of beef	88.7%	8.5%	74.4%	18.8%	83.4%	10.1%	71.6%	21.3%	77.2%	15.5%	80.5%	13.2%
20. I need to develop a succession or retirement plan	84.5%	12.7%	63.2%	29.9%	79.4%	15.9%	66.3%	27.2%	76.2%	17.1%	73.5%	22.1%

	Less than 39		Older than 60		Would use EBVs		Wld not use EBVs		Accurate cost - yes		Accurate cost - no	
	#	%	#	%	#	%	#	%	#	%	#	%
RANKING % OF TOTAL	Average	Top 5	Average	Top 5	Average	Top 5	Average	Top 5	Average	Top 5	Average	Top 5
a. Know how to control and manage diseases and health	6.1%	39.4%	6.9%	55.2%	6.3%	44.1%	6.9%	50.3%	6.3%	40.8%	6.7%	50.2%
b. Understand how to control weeds, insect pests and vertebrate pests (e.g. rabbits, foxes, kangaroos. on your property	4.1%	14.1%	4.7%	22.4%	4.1%	15.3%	4.9%	25.5%	4.3%	17.8%	4.5%	19.7%
c. Have access to new pasture varieties to improve cattle production and the environment on your farm	5.1%	26.8%	5.5%	31.9%	5.2%	25.8%	5.9%	34.5%	5.4%	27.7%	5.5%	29.7%
d. Know how to maximise feed from your pastures without degrading the land	6.6%	40.8%	6.2%	38.8%	6.5%	41.7%	6.4%	41.8%	6.5%	43.5%	6.4%	40.5%
e. Know how to maximise beef production from the feed resources on your property	6.9%	53.5%	6.5%	45.7%	6.9%	52.2%	6.5%	44.8%	6.8%	51.3%	6.7%	48.3%
f. Know how to effectively use fertilisers and avoid adverse effects on the soil and water on your property	5.1%	15.5%	5.6%	25.9%	5.5%	23.4%	5.7%	31.5%	5.6%	26.7%	5.5%	26.0%
g. Have the ability to continuously improve the genetics of your cattle	5.2%	22.5%	4.9%	24.1%	5.5%	29.5%	4.3%	17.0%	4.9%	22.0%	5.1%	27.1%
h. Know how to identify market specifications and trends for the cattle you produce	5.6%	29.6%	5.5%	29.3%	5.6%	27.1%	5.2%	24.8%	5.5%	24.6%	5.4%	27.5%
i. Have the knowledge and skills to adapt your production system to meet market specifications	5.7%	25.4%	5.5%	26.7%	5.9%	32.2%	5.4%	23.6%	5.7%	30.9%	5.7%	27.9%

Southern Australian Beef Industry - Producer Survey

	Less than 39		Older than 60		Would use EBVs		Wld not use EBVs		Accurate cost - yes		Accurate cost - no	
	#	%	#	%	#	%	#	%	#	%	#	%
j. Be confident that industry QA systems will help ensure growth of the markets for your products	4.0%	9.9%	4.8%	22.4%	4.4%	18.0%	4.5%	20.0%	4.5%	20.9%	4.4%	17.1%
k. Have a cost effective approach to all the product and environment QA systems you are required to have	4.3%	18.3%	4.7%	21.6%	4.2%	13.9%	4.4%	14.5%	4.2%	15.7%	4.3%	13.0%
l. Know how to plan your property to balance your production with the environment	5.3%	31.0%	4.6%	18.1%	5.2%	26.8%	5.0%	23.0%	5.2%	23.6%	5.1%	26.8%
m. Have the business planning skills to maximise your return on investment and improve your lifestyle	6.4%	46.5%	5.6%	29.3%	6.0%	39.0%	5.5%	29.7%	5.9%	36.6%	5.7%	34.9%
n. Know how to attract, develop and retain good quality staff	2.9%	12.7%	2.7%	9.5%	2.5%	8.1%	2.5%	9.7%	2.6%	9.4%	2.4%	8.2%
o. Be confident that beef is recognised in the market place for its value for money	5.1%	22.5%	5.5%	31.9%	5.7%	30.8%	5.7%	32.1%	5.8%	31.9%	5.6%	30.9%
p. Be confident the industry supply chain post-farm-gate is improving its efficiency	5.2%	28.2%	5.0%	21.6%	5.0%	23.7%	5.2%	22.4%	5.2%	25.1%	5.0%	21.9%
q. Know how to monitor things like soil, water and bio-diversity so you can manage the impact of your beef operation on the environment	4.3%	11.3%	4.0%	12.1%	4.2%	12.9%	4.3%	11.5%	4.2%	11.0%	4.2%	13.4%

Southern Australian Beef Industry - Producer Survey

	Less than 39		Older than 60		Would use EBVs		Wld not use EBVs		Accurate cost - yes		Accurate cost - no	
	#	%	#	%	#	%	#	%	#	%	#	%
r. Understand the likely effects on your beef business of emerging environmental issues such as genetically modified organisms (GMOs., greenhouse gases and salinity	4.1%	12.7%	3.7%	10.3%	3.5%	9.2%	4.0%	12.1%	3.7%	11.0%	3.6%	9.7%
s. Know the wider community has confidence that beef producers responsibly manage environment and animal welfare issues	4.1%	21.1%	4.3%	18.1%	4.3%	18.3%	4.4%	18.8%	4.2%	20.9%	4.4%	16.7%
t. Have research results delivered in a way which suits your business and learning style	4.0%	18.3%	3.7%	5.2%	3.5%	8.1%	3.6%	12.1%	3.4%	8.4%	3.6%	10.4%

	Less than 39		Older than 60		Would use EBVs		Wld not use EBVs		Accurate cost - yes		Accurate cost - no	
	#	%	#	%	#	%	#	%	#	%	#	%
SATISFACTION	Average	Poor	Average	Poor	Average	Poor	Average	Poor	Average	Poor	Average	Poor
a. Know how to control and manage diseases and health problems with your cattle	3.24	2.8%	3.29	5.5%	3.22	4.5%	3.10	8.1%	3.15	5.3%	3.20	6.1%
b. Understand how to control weeds, insect pests and vertebrate pests (e.g. rabbits, foxes, kangaroos. on your property	3.31	0.0%	3.14	6.5%	3.18	4.8%	3.17	8.1%	3.15	6.9%	3.19	5.4%
c. Have access to new pasture varieties to improve cattle production and the environment on your farm	3.24	2.8%	3.09	7.3%	3.15	4.2%	3.06	9.3%	3.13	5.3%	3.10	6.5%
d. Know how to maximise feed from your pastures without degrading the land	2.99	4.2%	3.11	6.4%	3.04	3.8%	3.01	6.8%	3.05	5.3%	3.01	4.6%
e. Know how to maximise beef production from the feed resources on your property	3.08	2.8%	2.95	6.4%	3.01	5.2%	2.95	6.2%	3.05	7.4%	2.94	4.2%
f. Know how to effectively use fertilisers and avoid adverse effects on the soil and water on your property	3.16	4.3%	2.97	4.6%	2.96	6.7%	3.04	6.2%	3.03	7.1%	2.95	6.1%
g. Have the ability to continuously improve the genetics of your cattle	3.30	4.2%	3.14	6.3%	3.19	5.9%	3.11	6.2%	3.27	4.8%	3.09	6.9%
h. Know how to identify market specifications and trends for the cattle you produce	2.92	7.0%	3.00	3.7%	2.88	5.6%	2.88	10.0%	2.86	4.8%	2.89	8.8%
i. Have the knowledge and skills to adapt your production system to meet market specifications	2.94	0.0%	2.83	8.3%	2.85	5.2%	2.79	6.9%	2.78	7.5%	2.86	4.6%

Southern Australian Beef Industry - Producer Survey

	Less than 39		Older than 60		Would use EBVs		Wld not use EBVs		Accurate cost - yes		Accurate cost - no	
	#	%	#	%	#	%	#	%	#	%	#	%
j. Be confident that industry QA systems will help ensure growth of the markets for your products	2.66	9.9%	2.57	15.5%	2.56	15.3%	2.54	15.4%	2.47	18.1%	2.61	13.4%
k. Have a cost effective approach to all the product and environment QA systems you are required to have	3.00	11.3%	3.00	13.6%	3.00	13.6%	3.00	11.9%	3.00	12.8%	3.00	13.1%
l. Know how to plan your property to balance your production with the environment	2.93	1.4%	2.93	7.3%	2.83	4.5%	2.93	6.2%	2.85	4.3%	2.87	5.7%
m. Have the business planning skills to maximise your return on investment and improve your lifestyle	2.97	2.8%	2.81	7.3%	2.88	5.9%	2.75	9.3%	2.88	5.9%	2.80	8.0%
n. Know how to attract, develop and retain good quality staff	2.57	12.9%	2.63	14.4%	2.68	10.9%	2.65	12.2%	2.73	8.8%	2.62	13.3%
o. Be confident that beef is recognised in the market place for its value for money	2.68	11.3%	2.78	11.8%	2.56	13.9%	2.79	13.6%	2.54	14.9%	2.71	13.0%
p. Be confident the industry supply chain post-farm-gate is improving its efficiency	2.48	12.7%	2.60	12.8%	2.48	14.6%	2.55	14.2%	2.39	16.6%	2.59	13.0%
q. Know how to monitor things like soil, water and bio-diversity so you can manage the impact of your beef operation on the environment	2.92	5.6%	2.81	7.3%	2.85	8.3%	2.76	7.5%	2.81	8.0%	2.82	8.0%

Southern Australian Beef Industry - Producer Survey

	Less than 39		Older than 60		Would use EBVs		Wld not use EBVs		Accurate cost - yes		Accurate cost - no	
	#	%	#	%	#	%	#	%	#	%	#	%
r. Understand the likely effects on your beef business of emerging environmental issues such as genetically modified organisms (GMOs., greenhouse gases and salinity	2.56	14.1%	2.35	16.5%	2.32	19.8%	2.41	18.0%	2.36	18.1%	2.35	19.9%
s. Know the wider community has confidence that beef producers responsibly manage environment and animal welfare issues	2.54	8.5%	2.57	15.5%	2.42	17.4%	2.52	13.0%	2.40	16.5%	2.49	15.3%
t. Have research results delivered in a way which suits your business and learning style	2.61	14.1%	2.75	8.2%	2.70	10.1%	2.58	11.2%	2.72	10.1%	2.62	10.8%

Southern Australian Beef Industry - Producer Survey

	MLA Members		Non MLA Members		NSW SOUTH		NSW NORTH		SA South East		SA The Rest	
	#	%	#	%	#	%	#	%	#	%	#	%
Number	241		224		55		77		16		39	
80% or more Income from beef												
Yes	109	45.2%	110	49.1%	27	49.1%	40	51.9%	3	18.8%	10	25.6%
No	132	54.8%	114	50.9%	28	50.9%	37	48.1%	13	81.3%	29	74.4%
Total	241	100.0%	224	100.0%	55	100.0%	77	100.0%	16	100.0%	39	100.0%
Gross income from beef												
Less than $100,000	127	52.7%	185	82.6%	35	63.6%	37	48.1%	7	43.8%	30	76.9%
Between $100k and $200k	58	24.1%	26	11.6%	7	12.7%	14	18.2%	5	31.3%	6	15.4%
Over $200,000	56	23.2%	13	5.8%	13	23.6%	26	33.8%	4	25.0%	3	7.7%
Total	241	100.0%	224	100.0%	55	100.0%	77	100.0%	16	100.0%	39	100.0%
Category												
Small Beef	50	20.7%	87	38.8%	15	27.3%	14	18.2%	1	6.3%	7	17.9%
Medium Beef	21	8.7%	15	6.7%	4	7.3%	7	9.1%	1	6.3%	2	5.1%
Large Beef	38	15.8%	8	3.6%	8	14.5%	19	24.7%	1	6.3%	1	2.6%
Small Mixed	77	32.0%	98	43.8%	20	36.4%	23	29.9%	6	37.5%	23	59.0%
Medium Mixed	37	15.4%	11	4.9%	3	5.5%	7	9.1%	4	25.0%	4	10.3%
Large Mixed	18	7.5%	5	2.2%	5	9.1%	7	9.1%	3	18.8%	2	5.1%
Total	241	100.0%	224	100.0%	55	100.0%	77	100.0%	16	100.0%	39	100.0%
State												
NSW - NORTH	58	24.1%	19	8.5%	0	0.0%	77	100.0%	0	0.0%	0	0.0%
NSW - SOUTH	38	15.8%	17	7.6%	55	100.0%	0	0.0%	0	0.0%	0	0.0%
SA - SOUTH EAST	15	6.2%	24	10.7%	0	0.0%	0	0.0%	0	0.0%	39	100.0%
SA - THE REST	11	4.6%	5	2.2%	0	0.0%	0	0.0%	16	100.0%	0	0.0%
TAS	44	18.3%	53	23.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
VIC	46	19.1%	46	20.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
WA - NORTH	15	6.2%	29	12.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
WA - SOUTH	14	5.8%	31	13.8%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total	241	100.0%	224	100.0%	55	100.0%	77	100.0%	16	100.0%	39	100.0%

Southern Australian Beef Industry - Producer Survey

	MLA Members		Non MLA Members		NSW SOUTH		NSW NORTH		SA South East		SA The Rest	
	#	%	#	%	#	%	#	%	#	%	#	%
Principal beef business												
Breeder	198	82.2%	162	72.3%	44	80.0%	66	85.7%	12	75.0%	31	79.5%
Finisher	33	13.7%	43	19.2%	9	16.4%	8	10.4%	2	12.5%	5	12.8%
Backgrounder	1	0.4%	8	3.6%	1	1.8%	0	0.0%	0	0.0%	1	2.6%
Lot Feeder	5	2.1%	2	0.9%	0	0.0%	2	2.6%	0	0.0%	0	0.0%
Dairy	4	1.7%	9	4.0%	1	1.8%	1	1.3%	2	12.5%	2	5.1%
Total	241	100.0%	224	100.0%	55	100.0%	77	100.0%	16	100.0%	39	100.0%
Gender												
Male	186	77.2%	178	79.5%	42	76.4%	60	77.9%	12	75.0%	28	71.8%
Female	55	22.8%	46	20.5%	13	23.6%	17	22.1%	4	25.0%	11	28.2%
Total	241	100.0%	224	100.0%	55	100.0%	77	100.0%	16	100.0%	39	100.0%
Age												
Less than 20	0	0.0%	2	0.9%	0	0.0%	0	0.0%	0	0.0%	1	2.6%
20-39	35	14.5%	34	15.2%	12	21.8%	9	11.7%	5	31.3%	9	23.1%
40-49	63	26.1%	55	24.6%	10	18.2%	19	24.7%	7	43.8%	5	12.8%
50-59	93	38.6%	66	29.5%	18	32.7%	31	40.3%	1	6.3%	18	46.2%
60-74	42	17.4%	57	25.4%	14	25.5%	15	19.5%	3	18.8%	6	15.4%
75 and over	8	3.3%	10	4.5%	1	1.8%	3	3.9%	0	0.0%	0	0.0%
Total	241	100.0%	224	100.0%	55	100.0%	77	100.0%	16	100.0%	39	100.0%
Others Involved in Decision Making												
Spouse	138	56.6%	119	64.0%	26	53.1%	41	49.4%	9	52.9%	22	51.2%
Parents	21	8.6%	12	6.5%	4	8.2%	7	8.4%	2	11.8%	7	16.3%
Siblings	22	9.0%	18	9.7%	5	10.2%	7	8.4%	2	11.8%	5	11.6%
Business Partner	5	2.0%	4	2.2%	1	2.0%	4	4.8%	0	0.0%	1	2.3%
Other (Children)	58	23.8%	33	17.7%	13	26.5%	24	28.9%	4	23.5%	8	18.6%
Total	244	100.0%	186	100.0%	49	100.0%	83	100.0%	17	100.0%	43	100.0%

Southern Australian Beef Industry - Producer Survey

	MLA Members		Non MLA Members		NSW SOUTH		NSW NORTH		SA South East		SA The Rest	
	#	%	#	%	#	%	#	%	#	%	#	%
Property size (hectares)												
Average	2423		23476		4540		66885		2611		2840	
Median	813		203		800		1200		1214		480	
Std Dev	8689		334033		16778		569583		4600		9123	
Average annual rainfall (mm)												
Average	770		735		749		766		634		605	
Median	750		750		711		762		640		533	
Std Dev	318		286		246		268		166		267	
Total number of cattle												
Average	676		392		659		1170		612		272	
Median	350		120		240		450		375		140	
Std Dev	1038		2358		1271		4047		839		435	
Would use EBVs												
Yes	176	73.0%	120	53.6%	41	74.5%	53	68.8%	8	50.0%	21	53.8%
No	65	27.0%	104	46.4%	14	25.5%	24	31.2%	8	50.0%	18	46.2%
	241	100.0%	224	100.0%	55	100.0%	77	100.0%	16	100.0%	39	100.0%
Accurate cost												
Yes	113	46.9%	80	35.7%	24	43.6%	39	50.6%	7	43.8%	21	53.8%
No	128	53.1%	144	64.3%	31	56.4%	38	49.4%	9	56.3%	18	46.2%
	241	100.0%	224	100.0%	55	100.0%	77	100.0%	16	100.0%	39	100.0%
Q4. MLA member												
Yes	241	100.0%	0	0.0%	38	69.1%	58	75.3%	11	68.8%	15	38.5%
No	0	0.0%	224	100.0%	17	30.9%	19	24.7%	5	31.3%	24	61.5%
	241	100.0%	224	100.0%	55	100.0%	77	100.0%	16	100.0%	39	100.0%

Southern Australian Beef Industry - Producer Survey

ATTITUDES	MLA Members		Non MLA Members		NSW SOUTH		NSW NORTH		SA South East		SA The Rest	
	#	%	#	%	#	%	#	%	#	%	#	%
	A&SA%	D&SD%	A&SA%	D&SD%	A&SA%	D&SD%	A&SA%	D&SD%	A&SA%	D&SD%	A&SA%	D&SD%
1. Cloning and gene technologies will be important in the beef industry in the	56.0%	24.5%	46.9%	34.4%	56.4%	27.3%	49.4%	27.3%	43.8%	43.8%	66.7%	23.1%
2. The most effective way to achieve market specifications on my property is to use cattle	24.1%	49.0%	26.8%	50.0%	27.3%	43.6%	14.3%	59.7%	31.3%	50.0%	23.1%	46.2%
3. Producers that use supplementary feeding make more money	40.7%	41.5%	43.3%	39.3%	36.4%	43.6%	40.3%	40.3%	37.5%	37.5%	43.6%	35.9%
4. Investing in plant breeding is more likely to improve my bottom line than an equivalent	36.5%	36.9%	39.3%	32.1%	41.8%	38.2%	29.9%	39.0%	18.8%	56.3%	35.9%	35.9%
5. Grazing management is more effective than chemical or insects for weed control	61.0%	24.1%	67.9%	22.8%	49.1%	36.4%	72.7%	15.6%	50.0%	25.0%	53.8%	33.3%
6. Pasture productivity is the most important business profit driver	86.7%	6.2%	87.5%	5.8%	87.3%	7.3%	87.0%	7.8%	68.8%	25.0%	79.5%	5.1%
7. High stocking rates increase animal health problems	71.4%	20.7%	73.7%	21.4%	74.5%	10.9%	76.6%	15.6%	81.3%	18.8%	82.1%	17.9%
8. Planting more trees on my farm would improve my profitability	40.7%	47.3%	40.2%	47.8%	32.7%	47.3%	20.8%	66.2%	43.8%	50.0%	41.0%	38.5%
9. I should be financially rewarded for environmentally sustainable beef production	86.3%	7.1%	83.0%	10.7%	83.6%	10.9%	84.4%	3.9%	81.3%	6.3%	84.6%	12.8%

Southern Australian Beef Industry - Producer Survey

	MLA Members		Non MLA Members		NSW SOUTH		NSW NORTH		SA South East		SA The Rest	
	#	%	#	%	#	%	#	%	#	%	#	%
10. Government environmental policy will have a negative impact on my beef business in the future	42.7%	35.3%	46.4%	32.1%	45.5%	36.4%	62.3%	20.8%	31.3%	50.0%	38.5%	35.9%
11. Increasing bio-diversity (flora and fauna) should be an important part of managing my property	71.4%	19.1%	71.9%	15.6%	61.8%	20.0%	70.1%	20.8%	81.3%	12.5%	82.1%	10.3%
12. The beef industry of the future will require QA and certification to maintain market access	88.8%	7.9%	83.5%	9.4%	85.5%	9.1%	89.6%	6.5%	81.3%	18.8%	89.7%	7.7%
13. The beef industry should invest in convincing consumers that beef is a healthy food	97.1%	1.7%	95.1%	2.7%	92.7%	3.6%	97.4%	2.6%	87.5%	6.3%	94.9%	0.0%
14. Using new on-farm technologies will give me a market edge in the future	78.0%	10.0%	79.5%	11.2%	92.7%	0.0%	75.3%	10.4%	68.8%	18.8%	76.9%	20.5%
15. New research is needed to identify new on-farm technologies	82.2%	8.3%	79.0%	9.4%	90.9%	1.8%	83.1%	9.1%	93.8%	0.0%	74.4%	5.1%
16. Users of MLA's research products should pay a commercial price for them	54.4%	28.6%	62.9%	22.8%	63.6%	20.0%	50.6%	26.0%	50.0%	37.5%	41.0%	35.9%
17. The MLA levy should be used for on-farm rather than off-farm research, development and delivery	35.3%	31.1%	51.3%	25.4%	40.0%	30.9%	39.0%	19.5%	43.8%	25.0%	33.3%	46.2%
18. Protecting the environment is more important to me than profit	25.3%	43.2%	39.7%	40.2%	27.3%	29.1%	23.4%	50.6%	6.3%	43.8%	23.1%	38.5%

Southern Australian Beef Industry - Producer Survey

	MLA Members		Non MLA Members		NSW SOUTH		NSW NORTH		SA South East		SA The Rest	
	#	%	#	%	#	%	#	%	#	%	#	%
19. It is worthwhile investing in research to reduce the amount of feed consumed by cattle to turn off a set amount of beef	84.6%	10.0%	73.2%	18.8%	89.1%	7.3%	80.5%	14.3%	62.5%	25.0%	61.5%	20.5%
20. I need to develop a succession or retirement plan	76.3%	19.5%	72.8%	20.5%	80.0%	16.4%	75.3%	22.1%	68.8%	31.3%	79.5%	12.8%

Southern Australian Beef Industry - Producer Survey

	MLA Members		Non MLA Members		NSW SOUTH		NSW NORTH		SA South East		SA The Rest	
	#	%	#	%	#	%	#	%	#	%	#	%
RANKING % OF TOTAL	Average	Top 5	Average	Top 5	Average	Top 5	Average	Top 5	Average	Top 5	Average	Top 5
a. Know how to control and manage diseases and health	6.2%	40.7%	6.9%	52.2%	6.3%	44.4%	6.1%	33.8%	7.1%	62.5%	7.3%	53.8%
b. Understand how to control weeds, insect pests and vertebrate pests (e.g. rabbits, foxes, kangaroos. on your property	3.9%	11.4%	5.0%	26.8%	3.9%	14.8%	3.8%	12.2%	4.4%	18.8%	3.8%	20.5%
c. Have access to new pasture varieties to improve cattle production and the environment on your farm	5.4%	28.4%	5.6%	29.5%	5.2%	24.1%	5.6%	32.4%	6.3%	37.5%	4.2%	15.4%
d. Know how to maximise feed from your pastures without degrading the land	6.3%	39.0%	6.6%	44.6%	5.9%	31.5%	6.4%	45.9%	5.8%	25.0%	5.9%	38.5%
e. Know how to maximise beef production from the feed resources on your property	6.8%	51.7%	6.7%	47.3%	6.4%	38.9%	6.6%	45.9%	7.1%	50.0%	6.5%	46.2%
f. Know how to effectively use fertilisers and avoid adverse effects on the soil and water on your property	5.4%	24.6%	5.7%	28.1%	5.3%	14.8%	5.2%	23.0%	5.6%	37.5%	4.7%	17.9%
g. Have the ability to continuously improve the genetics of your cattle	5.3%	25.4%	4.8%	24.6%	4.9%	16.7%	5.4%	27.0%	6.8%	37.5%	5.4%	25.6%
h. Know how to identify market specifications and trends for the cattle you produce	5.8%	33.1%	5.1%	19.2%	6.1%	42.6%	6.1%	32.4%	6.1%	31.3%	5.2%	23.1%
i. Have the knowledge and skills to adapt your production system to meet market specifications	5.8%	30.5%	5.6%	27.7%	6.2%	37.0%	6.0%	31.1%	6.0%	43.8%	5.7%	33.3%

Southern Australian Beef Industry - Producer Survey

	MLA Members		Non MLA Members		NSW SOUTH		NSW NORTH		SA South East		SA The Rest	
	#	%	#	%	#	%	#	%	#	%	#	%
j. Be confident that industry QA systems will help ensure growth of the markets for your products	4.6%	20.3%	4.3%	17.0%	4.6%	24.1%	4.5%	13.5%	2.9%	0.0%	5.1%	20.5%
k. Have a cost effective approach to all the product and environment QA systems you are required to have	4.2%	14.4%	4.3%	13.8%	4.4%	20.4%	4.3%	13.5%	3.8%	6.3%	4.4%	17.9%
l. Know how to plan your property to balance your production with the environment	5.1%	26.3%	5.1%	24.6%	4.8%	25.9%	5.3%	27.0%	4.5%	18.8%	5.5%	28.2%
m. Have the business planning skills to maximise your return on investment and improve your lifestyle	6.2%	42.4%	5.3%	28.6%	6.0%	35.2%	5.7%	40.5%	7.5%	62.5%	5.4%	25.6%
n. Know how to attract, develop and retain good quality staff	2.5%	7.6%	2.4%	9.8%	2.7%	3.7%	2.1%	5.4%	3.3%	25.0%	2.2%	7.7%
o. Be confident that beef is recognised in the market place for its value for money	5.8%	32.2%	5.6%	30.4%	5.8%	37.0%	6.0%	33.8%	4.9%	6.3%	6.2%	43.6%
p. Be confident the industry supply chain post-farm-gate is improving its efficiency	5.2%	25.8%	4.9%	20.5%	5.3%	27.8%	5.6%	28.4%	4.5%	12.5%	6.0%	35.9%
q. Know how to monitor things like soil, water and bio-diversity so you can manage the impact of your beef operation on the environment ·	4.1%	8.5%	4.4%	16.5%	3.9%	9.3%	4.2%	14.9%	3.9%	6.3%	4.1%	7.7%

Southern Australian Beef Industry - Producer Survey

	MLA Members		Non MLA Members		NSW SOUTH		NSW NORTH		SA South East		SA The Rest	
	#	%	#	%	#	%	#	%	#	%	#	%
r. Understand the likely effects on your beef business of emerging environmental issues such as genetically modified organisms (GMOs., greenhouse gases and salinity	3.4%	7.6%	4.0%	12.9%	3.9%	16.7%	3.2%	6.8%	3.5%	0.0%	3.7%	7.7%
s. Know the wider community has confidence that beef producers responsibly manage environment and animal welfare issues	4.3%	19.1%	4.4%	17.9%	4.5%	22.2%	4.4%	18.9%	3.4%	12.5%	4.6%	17.9%
t. Have research results delivered in a way which suits your business and learning style	3.7%	11.0%	3.4%	8.0%	3.9%	13.0%	3.5%	13.5%	2.8%	6.3%	4.2%	12.8%

Southern Australian Beef Industry - Producer Survey

	MLA Members		Non MLA Members		NSW SOUTH		NSW NORTH		SA South East		SA The Rest	
	#	%	#	%	#	%	#	%	#	%	#	%
SATISFACTION	Average	Poor	Average	Poor	Average	Poor	Average	Poor	Average	Poor	Average	Poor
a. Know how to control and manage diseases and health problems with your cattle	3.26	3.0%	3.09	8.8%	3.22	4.0%	3.30	2.7%	3.44	12.5%	2.92	5.4%
b. Understand how to control weeds, insect pests and vertebrate pests (e.g. rabbits, foxes, kangaroos. on your property	3.21	4.3%	3.14	7.9%	3.16	2.0%	3.16	2.7%	3.44	6.3%	3.43	2.7%
c. Have access to new pasture varieties to improve cattle production and the environment on your farm	3.18	4.3%	3.04	7.9%	3.12	2.0%	3.11	5.5%	3.25	6.3%	3.08	5.3%
d. Know how to maximise feed from your pastures without degrading the land	3.12	3.4%	2.93	6.5%	3.06	2.0%	3.08	4.1%	3.00	0.0%	3.11	2.8%
e. Know how to maximise beef production from the feed resources on your property	3.05	4.7%	2.92	6.5%	2.90	5.9%	2.99	6.8%	3.13	0.0%	2.92	5.4%
f. Know how to effectively use fertilisers and avoid adverse effects on the soil and water on your property	2.98	5.7%	2.99	7.4%	2.96	4.0%	2.81	11.0%	3.00	6.3%	3.00	2.8%
g. Have the ability to continuously improve the genetics of your cattle	3.33	3.0%	2.98	9.3%	3.25	2.0%	3.33	5.6%	3.06	0.0%	3.08	5.4%
h. Know how to identify market specifications and trends for the cattle you produce	3.02	3.9%	2.73	10.7%	3.06	8.0%	2.89	2.8%	3.13	6.3%	2.97	2.7%
i. Have the knowledge and skills to adapt your production system to meet market specifications	2.94	4.7%	2.71	7.0%	2.78	7.8%	2.92	4.2%	3.00	0.0%	2.86	2.8%

	MLA Members		Non MLA Members		NSW SOUTH		NSW NORTH		SA South East		SA The Rest	
	#	%	#	%	#	%	#	%	#	%	#	%
j. Be confident that industry QA systems will help ensure growth of the markets for your products	2.61	12.4%	2.50	18.5%	2.68	10.0%	2.51	24.7%	2.69	12.5%	2.45	15.8%
k. Have a cost effective approach to all the product and environment QA systems you are required to have	3.00	11.6%	3.00	14.5%	3.00	16.0%	3.00	15.3%	3.00	18.8%	2.50	10.5%
l. Know how to plan your property to balance your production with the environment	2.87	5.2%	2.85	5.1%	3.00	0.0%	2.90	4.2%	3.25	0.0%	2.84	2.6%
m. Have the business planning skills to maximise your return on investment and improve your lifestyle	2.87	4.3%	2.80	10.2%	2.74	10.0%	2.71	6.9%	3.50	0.0%	2.84	5.3%
n. Know how to attract, develop and retain good quality staff	2.83	8.1%	2.48	15.0%	2.65	6.1%	2.84	11.9%	2.50	18.8%	2.74	14.7%
o. Be confident that beef is recognised in the market place for its value for money	2.62	13.2%	2.66	14.4%	2.82	8.0%	2.49	17.8%	2.75	12.5%	2.53	15.8%
p. Be confident the industry supply chain post-farm-gate is improving its efficiency	2.55	12.0%	2.46	17.1%	2.54	14.0%	2.42	19.2%	2.69	6.3%	2.50	13.2%
q. Know how to monitor things like soil, water and bio-diversity so you can manage the impact of your beef operation on the environment	2.88	6.8%	2.75	9.3%	3.00	5.9%	2.72	9.7%	2.81	0.0%	2.97	2.7%

Southern Australian Beef Industry - Producer Survey

	MLA Members		Non MLA Members		NSW SOUTH		NSW NORTH		SA South East		SA The Rest	
	#	%	#	%	#	%	#	%	#	%	#	%
r. Understand the likely effects on your beef business of emerging environmental issues such as genetically modified organisms (GMOs., greenhouse gases and salinity	2.35	17.1%	2.35	21.4%	2.46	16.0%	2.29	21.9%	2.63	12.5%	2.27	24.3%
s. Know the wider community has confidence that beef producers responsibly manage environment and animal welfare issues	2.35	16.7%	2.57	14.9%	2.32	26.0%	2.22	23.0%	2.56	12.5%	2.50	15.8%
t. Have research results delivered in a way which suits your business and learning style	2.73	8.5%	2.58	12.6%	2.71	5.9%	2.74	12.5%	2.63	12.5%	2.54	8.1%

Appendix 6 QFD Process Provider and Stakeholder Research Results

Categorised by:

R, D & E provider Respondents
❖   Role and organisation
❖   Attitude
❖   Importance of outcomes
❖   Satisfaction with outcomes

Stakeholder responses

Southern Australian Beef Industry

	All Operations		Research Mgmt		Research		Extension		Stakeholders	
	#	%	#	%	#	%	#	%	#	%
Principal Role										
R&D management	8	13.8%	8	100.0%	0	0.0%	0	0.0%		
Research	37	63.8%	0	0.0%	37	100.0%	0	0.0%		
Education	0	0.0%	0	0.0%	0	0.0%	0	0.0%		
Extension	13	22.4%	0	0.0%	0	0.0%	13	100.0%		
Other	0	0.0%	0	0.0%	0	0.0%	0	0.0%		
Total	58	100.0%	8	100.0%	37	100.0%	13	100.0%		
Organisation										
State or Commonwealth Government Department	57	98.3%	8	100.0%	36	97.3%	13	100.0%		
Government agency or educational institution	1	1.7%	0	0.0%	1	2.7%	0	0.0%		
Private Consultancy	0	0.0%	0	0.0%	0	0.0%	0	0.0%		
Merchandiser	0	0.0%	0	0.0%	0	0.0%	0	0.0%		
Other	0	0.0%	0	0.0%	0	0.0%	0	0.0%		
Total	58	100.0%	8	100.0%	37	100.0%	13	100.0%		
Regulatory										
- Yes	5	8.9%	1	12.5%	2	5.6%	2	16.7%		
- No	51	91.1%	7	87.5%	34	94.4%	10	83.3%		

Southern Australian Beef Industry

Attitudes	A&SA%	D&SD%	A&SA%	D&SD%	A&SA%	D&SD%	A&SA%	D&SD%	A&SA%	D&SD%
1.Cloning and gene technologies will be important in the beef industry in the future	80.7%	8.8%	87.5%	0.0%	77.8%	11.1%	84.6%	7.7%	85.7%	14.3%
2.The most effective way for beef producers to achieve market specifications is to use cattle genetics rather than nutrition	12.3%	52.6%	0.0%	50.0%	16.7%	44.4%	7.7%	76.9%		
3.Producers that use supplementary feeding make more money	19.0%	29.3%	37.5%	25.0%	13.5%	29.7%	23.1%	30.8%		
4.Investing in plant breeding is more likely to improve producers' bottom lines than an equivalent investment in animal breeding	19.0%	50.0%	37.5%	50.0%	13.5%	54.1%	23.1%	38.5%		
5.Grazing management is more effective than chemicals or insects for weed control	36.8%	17.5%	75.0%	0.0%	30.6%	19.4%	30.8%	23.1%		
6.Pasture productivity is the most important business profit driver	56.1%	12.3%	50.0%	0.0%	50.0%	19.4%	76.9%	0.0%		
7.High stocking rates increase animal health problems	39.7%	32.8%	12.5%	37.5%	48.6%	27.0%	30.8%	46.2%		
8.Planting more trees on beef properties would improve their profitability	19.3%	26.3%	25.0%	25.0%	16.7%	27.8%	23.1%	23.1%		
9.Producers should be financially rewarded for environmentally sustainable beef production practices	77.6%	5.2%	62.5%	12.5%	83.8%	2.7%	69.2%	7.7%	100.0%	0.0%
10.Government environmental policy will have a negative impact on beef businesses in the future	31.0%	29.3%	12.5%	75.0%	29.7%	27.0%	46.2%	7.7%		
11.Increasing bio-diversity (flora and fauna) should be an important part of managing beef properties	67.2%	13.8%	87.5%	12.5%	56.8%	13.5%	84.6%	15.4%		
12.The beef industry of the future will require QA and certification to maintain market access	93.1%	0.0%	87.5%	0.0%	94.6%	0.0%	92.3%	0.0%		

Southern Australian Beef Industry

Attitudes	A&SA%	D&SD%	A&SA%	D&SD%	A&SA%	D&SD%	A&SA%	D&SD%	A&SA%	D&SD%
13.The beef industry should invest in convincing consumers that beef is a healthy food	86.2%	1.7%	87.5%	0.0%	81.1%	2.7%	100.0%	0.0%	100.0%	0.0%
14.Using new on-farm technologies will give producers a market edge in the future	94.8%	1.7%	87.5%	12.5%	94.6%	0.0%	100.0%	0.0%		
15.New research is needed to identify new on-farm technologies	94.8%	0.0%	87.5%	0.0%	94.6%	0.0%	100.0%	0.0%	85.7%	0.0%
16.Users of MLA's research products should pay a commercial price for them	29.8%	38.6%	50.0%	25.0%	32.4%	35.1%	8.3%	58.3%	71.4%	14.3%
17.The MLA levy should be used for on-farm rather than off-farm research, development and delivery	31.6%	47.4%	50.0%	37.5%	36.1%	36.1%	7.7%	84.6%	14.3%	57.1%
18.Protecting the environment is more important than beef producer profits	17.2%	41.4%	0.0%	62.5%	16.2%	37.8%	30.8%	38.5%	28.6%	42.9%
19.It is worthwhile investing in research to reduce the amount of feed consumed by cattle to turn off a set amount of beef	74.1%	12.1%	50.0%	25.0%	75.7%	8.1%	84.6%	15.4%		
20.Private providers should be used more for information delivery in the beef industry	32.8%	29.3%	50.0%	12.5%	35.1%	21.6%	15.4%	61.5%	57.1%	0.0%
My organisation has sufficient influence in setting direction for on-farm RD&E in the southern Australian beef industry at the policy regulatory and operational levels									33.3%	33.3%

Southern Australian Beef Industry

Importance	Average%	Top 3 %	Average%	Top 3 %	Average%	Top 3 %	Average%	Top 3 %
a)Gives clear directions on program objectives so that providers can plan for the future	11.6%	47.3%	12.0%	50.0%	12.5%	57.1%	8.8%	16.7%
b)Facilitates the submission of research and information delivery proposals	7.7%	16.4%	8.4%	12.5%	8.1%	20.0%	6.1%	8.3%
c)Ensures that appropriate information delivery is planned into projects from the start	11.1%	40.0%	14.1%	62.5%	10.0%	28.6%	12.3%	58.3%
d)Ensures that research outcomes are packaged in a format that can be easily delivered to producers	11.7%	42.6%	12.7%	37.5%	10.6%	32.4%	14.1%	75.0%
e)Encourages lateral thinking and innovation in project design, development and delivery	12.0%	45.5%	11.4%	37.5%	12.1%	48.6%	12.3%	41.7%
f)Engenders confidence by all concerned in the transparency of the project selection process	8.8%	21.8%	8.6%	25.0%	9.6%	25.7%	6.7%	8.3%
g)Ensures the process for project monitoring and evaluation encourages continuous improvement throughout the project	8.9%	14.5%	10.5%	37.5%	8.1%	11.4%	10.0%	8.3%
h)Provides you with security of ongoing funding so you can focus on the job in hand	8.9%	23.6%	7.0%	12.5%	10.0%	31.4%	6.8%	8.3%
i)Maximises the benefits of collaboration among researchers and information providers	9.4%	18.2%	7.0%	0.0%	9.0%	14.3%	12.1%	41.7%
j)Ensures sufficient numbers of skilled research and information deliverers will be available in the	9.9%	27.3%	8.2%	25.0%	9.9%	25.7%	10.9%	33.3%
	100.0%		100.0%		100.0%		100.0%	

Southern Australian Beef Industry

Satisfaction	Average	%Poor	Average	%Poor	Average	%Poor	Average	%Poor
a)Gives clear directions on program objectives so that providers can plan for the future	2.55	10.9%	2.38	25.0%	2.44	11.8%	2.92	0.0%
b)Facilitates the submission of research and information delivery proposals	2.57	11.1%	2.50	12.5%	2.45	12.1%	2.92	7.7%
c)Ensures that appropriate information delivery is planned into projects from the start	2.74	1.9%	2.75	0.0%	2.82	3.0%	2.54	0.0%
d)Ensures that research outcomes are packaged in a format that can be easily delivered to producers	2.67	7.4%	2.50	12.5%	2.85	3.0%	2.31	15.4%
e)Encourages lateral thinking and innovation in project design, development and delivery	2.35	11.1%	2.13	12.5%	2.27	12.1%	2.69	7.7%
f)Engenders confidence by all concerned in the transparency of the project selection process	2.25	22.6%	1.88	37.5%	2.13	25.0%	2.77	7.7%
g)Ensures the process for project monitoring and evaluation encourages continuous improvement throughout the project	2.96	0.0%	2.75	0.0%	3.00	0.0%	3.00	0.0%
h)Provides you with security of ongoing funding so you can focus on the job in hand	2.37	14.8%	1.75	25.0%	2.61	6.1%	2.15	30.8%
i)Maximises the benefits of collaboration among researchers and information providers	2.70	5.6%	2.75	12.5%	2.79	3.0%	2.46	7.7%
j)Ensures sufficient numbers of skilled research and information deliverers will be available in the	2.06	26.4%	1.88	50.0%	2.06	21.9%	2.15	23.1%

Southern Australian Beef Industry

Stakeholders	0	0	0	0	7

Stakeholder Priorities

	Average%	Top 3 %
a)Enables fundamental research that may yield long term benefits	14.3%	57.1%
b)Enables applied research to maximise the benefits from available knowledge	15.1%	71.4%
c)Encourages an increased rate of adoption of research outcomes	14.5%	57.1%
d)Ensures the research and information delivery planning and implementation considers economic, environmental and social aspects	8.8%	14.3%
e)Helps maintain and enhance core RD&E capabilities needed to respond in the future	10.1%	28.6%
f)Protects the intellectual property of research supported by the southern beef industry	4.2%	0.0%
g)Improves industry viability by assisting industry sectors to work together	8.1%	28.6%
h)Gives due recognition to the contributions made by stakeholder organisations	6.0%	0.0%
i)Maximises co-investment in RD&E from all sources	9.4%	14.3%
j)Integrates activities across states and geographic boundaries to avoid unnecessary duplication	9.6%	28.6%
	100.0%	

Southern Australian Beef Industry

Stakeholder Satisfaction					Average	%Poor
a)Enables fundamental research that may yield long term benefits					2.00	28.6%
b)Enables applied research to maximise the benefits from available knowledge					2.57	0.0%
c)Encourages an increased rate of adoption of research outcomes					2.14	0.0%
d)Ensures the research and information delivery planning and implementation considers economic, environmental and social aspects					2.29	14.3%
e)Helps maintain and enhance core RD&E capabilities needed to respond in the future					2.14	28.6%
f)Protects the intellectual property of research supported by the southern beef industry					3.14	0.0%
g)Improves industry viability by assisting industry sectors to work together					2.29	14.3%
h)Gives due recognition to the contributions made by stakeholder organisations					2.43	28.6%
i)Maximises co-investment in RD&E from all sources					3.00	14.3%
j)Integrates activities across states and geographic boundaries to avoid unnecessary duplication					2.29	14.3%

Appendix 7 Producer Quantitative Survey Questionnaire

Southern Australian Beef Industry
Research and Information Delivery Survey

Part 1 – Administered over the phone

Respondent No _____ *Respondent name* _____

Phone No _____ *Post Code* _____

Ask to speak to someone who is the primary day-to-day decision maker in the operation of the beef enterprise (not necessarily the husband or oldest person).

My name is .... from .... This is not a sales call. We are undertaking research on behalf of Meat & Livestock Australia.

As a levy payer, Meat & Livestock Australia is your company. It uses your transaction levies for market development and for research and information delivery across all of Australia.

MLA is reviewing research and information delivery priorities to better meet the needs of producers in the southern Australian beef industry.

This survey is to gather your views on the future directions for research and delivery of information to improve on farm profitability and sustainability.

By completing this survey you will contribute greatly to designing and implementing future programs that benefit your industry.

On completion of this survey, the results will be used to develop new research and information delivery programs.

Please be assured that your identity will be kept confidential. Your responses will be combined with all others, and individual responses will not be able to be identified.

To get it right for producers, would you mind answering some questions?
If not willing say 'thank you', finish the call and record the details of the person and reasons for non-response:
....

This is a two-part survey. We'll complete the Part One over the phone with you now and then I will send you Part Two. I will then phone you at a convenient time to complete Part Two with you.

Southern Australian Beef Industry
Research and Information Delivery Survey

Does 80% or more of your farm income come from beef? *Tick one only.*
❑ Yes
❑ No

Is the gross income from your beef operation? *Tick one only.*
❑ Less than $100,00
❑ Between $100,000 and $200,000
❑ More than $200,000

How would you describe your principal beef business. *Tick one only.*
❑   Breeder
❑   Finisher
❑   Backgrounder
❑   Lot Feeder
❑   Dairy

Gender *Tick one only.*
❑   Male
❑   Female

Which age category do you fall into? *Tick one only.*
❑   Less than 20
❑   20-39
❑   40-49
❑   50-59
❑   60-74
❑   75 and over

Who else is involved in the operational decision making on your property?
(More than one tick allowed)

❑   Spouse
❑   Parents
❑   Siblings
❑   Business partner
❑   Other, please specify ....

What is the size of your property in hectares: _____
Please note if the respondent can only give the size in acres and later convert to hectares.

What is the average rainfall of your property in mm pa: _____
Please note if the respondent can only give the size in inches and later convert to mm.

What is the total number of cattle on your property: _____
If they have a problem say "What is the number of cattle older than six months".

Southern Australian Beef Industry
Research and Information Delivery Survey

I am about to read you some statements. Could you please state whether you Strongly agree, Agree, Neither agree or disagree, Disagree or Strongly disagree.

Circle one rating for each statement. If they say 'agree' ask if that is 'strongly agree' or just 'agree' - similarly for the response 'disagree'.

1. Cloning and gene technologies will be important in the beef industry in the future	SA	A	N	D	SD
2. The most effective way to achieve market specifications on my property is to use cattle genetics rather than nutrition	SA	A	N	D	SD
3. Producers that use supplementary feeding make more money	SA	A	N	D	SD
4. Investing in plant breeding is more likely to improve my bottom line than an equivalent investment in animal breeding	SA	A	N	D	SD
5. Grazing management is more effective than chemical or insects for weed control	SA	A	N	D	SD
6. Pasture productivity is the most important business profit driver	SA	A	N	D	SD
7. High stocking rates increase animal health problems	SA	A	N	D	SD
8. Planting more trees on my farm would improve my profitability	SA	A	N	D	SD
9. I should be financially rewarded for environmentally sustainable beef production practices	SA	A	N	D	SD
10. Government environmental policy will have a negative impact on my beef business in the future	SA	A	N	D	SD
11. Increasing bio-diversity (flora and fauna) should be an important part of managing my property	SA	A	N	D	SD
12. The beef industry of the future will require QA and certification to maintain market access	SA	A	N	D	SD
13. The beef industry should invest in convincing consumers that beef is a healthy food	SA	A	N	D	SD
14. Using new on-farm technologies will give me a market edge in the future	SA	A	N	D	SD
15. New research is needed to identify new on-farm technologies	SA	A	N	D	SD
16. Users of MLA's research products should pay a commercial price for them	SA	A	N	D	SD
17. The MLA levy should be used for on-farm rather than off-farm research, development and delivery	SA	A	N	D	SD
18. Protecting the environment is more important to me than profit	SA	A	N	D	SD

Southern Australian Beef Industry
Research and Information Delivery Survey

	SA	A	N	D	SD
19. It is worthwhile investing in research to reduce the amount of feed consumed by cattle to turn off a set amount of beef					
20. I need to develop a succession or retirement plan	SA	A	N	D	SD

If multi breed estimated breeding values (EBVs) were available would you use them to make breeding decisions? *Tick one only.*

☐ Yes
☐ No

Can you currently put an accurate dollar figure on your cost of production? *Tick one only.*

☐ Yes
☐ No

Have you registered as a member of MLA? *Tick one only*

☐ Yes
☐ No

I will now fax you the second part of the survey. I will contact you again soon to guide you on the completion of the second part of the survey. In the meantime please read it so you can ask me if there is anything that is not clear.

Could I please have your fax number (or address if no fax)?

_____

And when would be a convenient time to call you back? _____

SAY YOU WILL CALL BACK WITHIN THE NEXT 24 TO 48 HOURS

THANK AND CLOSE

I Certify that this is a true, accurate and complete interview, conducted in accordance with IQCA Standards and the ICC/ESOMAR code of conduct. I will not disclose to any other person the content of this questionnaire or any other information relating to this project.

INTERVIEWER NAME..DATE..../ /

INTERVIEWER NO....................

Southern Australian Beef Industry
Research and Information Delivery Survey

(LETTERHEAD - Market Research Co.)

Date

Title Surname
Address 1
Address 2
Town
State postcode

OR

Fax number

Survey on Beef Research and Information Delivery
Part Two

Dear First Name,

Thank you for agreeing to participate in our survey on behalf of Meat & Livestock Australia.

As a levy payer, Meat & Livestock Australia is your company. It uses your transaction levies for market development and for research and information delivery across all of Australia. MLA is reviewing research and information delivery priorities for the southern Australian beef industry to better meet producer outcomes. This survey is to gather your views on the future directions for research and delivery of information to improve on farm profitability and sustainability.

By completing this survey you will contribute greatly to designing and implementing future programs that benefit your industry. When the survey is completed, the results will be used to develop new research and information delivery programs.

Please be assured that your identity will be kept confidential. Your responses will be combined with all others, and individual responses will not be able to be identified.

We will call you on the phone at .... (*researchers enter time and date*) to complete this part of the survey. In the meantime please read the attached statements carefully.

Thank you again for your cooperation.

Yours Sincerely,

Insert your name

Southern Australian Beef Industry
Research and Information Delivery Survey

Part Two

The following statements were recently made by producers about their desired outcomes from research and information delivery in the southern Australian beef industry. There are two things we want you to help us with.

1) Please indicate how important the outcome statements are to you when compared to each other by ranking them from 1 to 20 where 1 is the most important and 20 the least important.

2) Please indicate how well you think the current approaches to research and information delivery satisfy each outcome. On the attached form you will be asked to rate your satisfaction on each outcome as either:

> Extremely dissatisfied
> Dissatisfied
> Acceptable
> Satisfied
> Extremely satisfied

Example of how to complete the form

Please rank the following statements in order of priority with 1 being the most important and 20 being the least important based on the relative importance of the outcomes to you.		How satisfied are you with current research and information delivery. Tick only one box in each line.					
Please rank how important it is to you to:	Ranking	Extremely dissatisfied	Dissatisfied	Acceptable	Satisfied	Extremely satisfied	
Example outcome statement	14				√		
Example outcome statement	6		√				
Example outcome statement	2					√	
Example outcome statement	20			√			
Etc							

Southern Australian Beef Industry
Research and Information Delivery Survey

Please rank the following statements in order of priority with 1 being the most important and 20 being the least important based on the relative importance of the outcomes to you.		How satisfied are you with current research and information delivery. Tick only one box in each line.					
Please rank how important it is to you to:	Ranking	Extremely Dissatisfied	dissatisfied	Acceptable	Satisfied	Extremely satisfied
a) Know how to control and manage diseases and health problems affecting your cattle						
b) Understand how to control weeds, insect pests and vertebrate pests (e.g. rabbits, foxes, kangaroos) on your property						
c) Have access to new pasture varieties and establishment technologies to improve cattle production and the environment on your farm						
d) Know how to maximise feed from your pastures without degrading the land						
e) Know how to maximise beef production from the feed resources on your property						
f) Know how to effectively use fertilisers and avoid adverse effects on the soil and water on your property						
g) Have the ability to continuously improve the genetics of your cattle						
h) Know how to identify market specifications and trends for the cattle you produce						
i) Have the knowledge and skills to adapt your production system to meet market specifications						
j) Be confident that industry QA systems will help ensure growth of the markets for your products						
k) Be able to cost effectively meet all your production and environment QA requirements						
l) Know how to plan your property to balance production with the environment						
m) Have the business planning skills to maximise your return on investment						
n) Know how to attract, develop and retain good quality staff						
o) Be confident that beef is recognised in the market place for its value for money						
p) Be confident the industry supply chain post-farm-gate is improving its efficiency						
q) Know how to monitor things like soil, water and bio-diversity so you can manage the impact of your beef operation on the environment						
r) Understand the likely effects on your beef business of emerging environmental issues such as genetically modified organisms (GMOs), greenhouse gases, salinity and acidity						
s) Feel the wider community believe that beef producers responsibly manage environment and animal welfare issues						
t) Have research results delivered in a way which suits your business and learning style						

Southern Australian Beef Industry
Research and Information Delivery Survey

What do you think will be the biggest issues to impact on the beef industry in the next ten years?

_____

_____

_____

_____

_____

_____

_____

_____

What changes would you like to implement that will have a big impact on your business?

_____

_____

_____

_____

_____

_____

_____

_____

What would it take to persuade you to adopt new on-farm practices?

_____

_____

_____

_____

_____

_____

_____

Any other comments?

_____

_____

_____

_____

_____

_____

_____

_____

Southern Australian Beef Industry
Research and Information Delivery Survey

Sample Design

	Minimum Quota
New South Wales	40
South Australia	40
Tasmania	40
Victoria	40
Western Australia	40

(Based on the answers to the first two questions in the survey enter one of the following 6 codes)

80% or more of income from Beef

1. Less than $100,000 gross income	Small Beef	40
2. $100,000 - $200,000	Medium Beef	40
3. $200,000 plus	Large Beef	40

Under 80% of income from Beef

4. Less than $100,000 gross income	Small Mixed	40
5. $100,000 - $200,000	Medium Mixed	40
6. $200,000 plus	Large Mixed	40

Females	40

Appendix 8 R, D & E Provider Quantitative Survey Questionnaire

Appendix 8: RD & E Provider Survey Form

Southern Australian Beef Industry
On-Farm Research and Information Delivery
Providers Survey

Meat & Livestock Austrälia is reviewing on-farm research and information delivery priorities to better meet the needs of everyone associated with the southern Australian beef industry.

As part of the planning process, detailed market research is being conducted with producers and other stakeholders. We also want to understand the views of people who are involved in research and information delivery so that we can design a comprehensive strategy that will meet everyone's needs. The results of this and the other surveys will be used to design and implement future programs that benefit the beef industry.

Please see the example before you complete the survey.

Please be assured that your response will be kept confidential and combined with all others, so that individual responses cannot be identified. Please email your response within seven days to Mike Walker of Customer Driven Strategies Pty (on mwalker@ozemail.com.au) who will collate the responses.

If you have any queries please contact Mike Walker on 0410 678 440 or Hutton Oddy at the MLA on 02 9463 9228.

Regards,

Name _____ Organisation

What is your <u>principal</u> role in Research and information delivery? (Please place an 'X' in one box only)

R&D management	
Research	
Education	
Extension	
Other	

If other, please specify

_____

Where are you employed? (please place an 'X' in one box only)

State or Commonwealth Government Department	
Government agency or educational institution	
Private Consultancy	
Merchandiser	
Other	

If other, please specify

_____

Do you have a regulatory role? (Please place an 'X' in one box only)

Yes	
No	

Could you please state whether you Strongly Agree (SA), Agree (A), Neither Agree or Disagree (N), Disagree (D) or Strongly Disagree (SD) with the following statements by entering SA, A, N, D or SD

Statement	Please enter SA, A, N, D or SD
1. Cloning and gene technologies will be important in the beef industry in the future	
2. The most effective way for beef producers to achieve market specifications is to use cattle genetics rather than nutrition	
3. Producers that use supplementary feeding make more money	
4. Investing in plant breeding is more likely to improve producers' bottom lines than an equivalent investment in animal breeding	
5. Grazing management is more effective than chemicals or insects for weed control	
6. Pasture productivity is the most important business profit driver	
7. High stocking rates increase animal health problems	
8. Planting more trees on beef properties would improve their profitability	
9. Producers should be financially rewarded for environmentally sustainable beef production practices	
10. Government environmental policy will have a negative impact on beef businesses in the future	
11. Increasing bio-diversity (flora and fauna) should be an important part of managing beef properties	
12. The beef industry of the future will require QA and certification to maintain market access	
13. The beef industry should invest in convincing consumers that beef is a healthy food	
14. Using new on-farm technologies will give producers a market edge in the future	
15. New research is needed to identify new on-farm technologies	
16. Users of MLA's research products should pay a commercial price for them	
17. The MLA levy should be used for on-farm rather than off-farm research, development and delivery	
18. Protecting the environment is more important than beef producer profits	
19. It is worthwhile investing in research to reduce the amount of feed consumed by cattle to turn off a set amount of beef	
20. Private providers should be used more for information delivery in the beef industry	

Outcome Statements

The following statements were made recently by people in the southern Australian beef industry about their desired outcomes to improve the overall process of research and information delivery.

There are two things we want you to help us with.

1) Please indicate how relatively important the outcome statements are to you when compared to each other by ranking them from 1 to 10 where 1 is the most important and 10 the least important.

2) Please indicate how well you think the current system satisfies each outcome. On the attached form you will be asked to rate your satisfaction with the current system as:

> Extremely Dissatisfied
> Dissatisfied
> Acceptable
> Satisfied
> Extremely Satisfied

Example of how to complete the form

| Please rank the following statements in order of priority with 1 being the most important and 10 being the least important based on the relative importance of the outcomes to you. | How satisfied are you with the current research and information delivery process? Tick only one box in each line. | | | | |
Please rank how important it is to you that future research and development in the southern Australian beef industry:	Ranking	Extremely Dissatisfied	Dissatisfied	Acceptable	Satisfied	Extremely satisfied
Example outcome statement	8	X				
Example outcome statement	1			X		
Example outcome statement	2		X			
Example outcome statement	5					X
Etc	4		X			

Outcome Statements

Please rank the following statements in order of priority with 1 being the most important and 10 being the least important based on the relative importance of the outcomes to you.	How satisfied are you with the current research and information delivery process? Tick only one box in each line.				
Please rank how important it is to you that future on-farm research and information delivery in the southern Australian beef industry: **Ranking**	Extremely Dissatisfied	Dissatisfied	Acceptable	Satisfied	Extremely satisfied
1. Gives clear directions on program objectives so that providers can plan for the future					
2. Facilitates the submission of research and information delivery proposals					
3. Ensures that appropriate information delivery is planned into projects from the start					
4. Ensures that research outcomes are packaged in a format that can be easily delivered to producers					
5. Encourages lateral thinking and innovation in project design, development and delivery					
6. Engenders confidence by all concerned in the transparency of the project selection process					
7. Ensures the process for project monitoring and evaluation encourages continuous improvement throughout the project					
8. Provides you with security of ongoing funding so you can focus on the job in hand					
9. Maximises the benefits of collaboration among researchers and information providers					
10. Ensures sufficient numbers of skilled research and information deliverers will be available in the future					

Any other comments on directions for research in the southern Australian beef industry?

Any other comments on directions in the southern Australian beef industry for:

a) Research?

b) Information delivery?